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STIC EIC 2100 Search Request Form

116422

Today's Date: 3/9/04

What date would you like to use to limit the search?

Priority Date:

Other:

Name James Seal

AU 2135 Examiner # 76900

Room # 4211 Phone 308-4562

Serial # 0948076

Format for Search Results (Circle One):

PAPER

DISK

EMAIL

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI Other _____

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

This application is based on a patent 6108423
Filed 19 Jul 1996 which has a
foreign priority JP 7-185724 21 July 1995
discloses a device for
This application reads a disk ~~and~~
and in particular the control information for
the ~~play back~~ mode. Decrypting a portion
of the recording information as key
information to generate an analog color

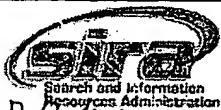
STIC Searcher Geoffrey St. Leger

Phone 308-7800

Date picked up 3/9/04

Date Completed 3/9/04

video signal
according to



arranging the signal

TYPE S1/5/1

1/5/1 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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15496976 PASCAL No.: 02-0192396

Known-IV attacks on triple modes of operation of block ciphers

ASIACRYPT 2001 : advances in cryptology : Gold Coast, 9-13 december 2001

DEUKJO HONG; JAECHUL SUNGL; SEOKHIE HONG; WONIL LEE; SANGJIN LEE; JONGIN LIM; OKYEON YI

BOYD Colin, ed

Center for Information Security Technologies (CIST), Korea University, Anam Dong, Sungbuk Gu, Seoul, Korea, Republic of; Electronics and Telecommunications Research Institute (ETRI), 161 Gajeong-dong, Yusong-Gu, Daejeon, 305-350, Korea, Republic of

International conference on the theory and application of cryptology and information security, 7 (Gold Coast AUS) 2001-12-09

Journal: Lecture notes in computer science, 2001, 2248 208-221

ISBN: 3-540-42987-5 ISSN: 0302-9743 Availability: INIST-16343; 354000097040330130

No. of Refs.: 8 ref.

Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)

Country of Publication: Germany

Language: English

With chosen-IV chosen texts, David Wagner has analyzed the multiple modes of operation proposed by Eli Biham in FSE'98. However, his method is too unrealistic. We use only known-IV chosen texts to attack many triple modes of operation which are combined with cascade operations. 123 triple modes are analyzed with complexities less than E. Biham's results. Our work shows that the securities of many triple modes decrease when the initial values are exposed.

English Descriptors: Initial value problem; Cryptanalysis; Cryptography; Encryption

French Descriptors: Probleme valeur initiale; Cryptanalyse; Cryptographie; Cryptage; Block cipher

Classification Codes: 001D04A04E

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File 8: Ei Compendex(R) 1970-2004/Feb W3
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File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec
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File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Jan
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File 62: SPIN(R) 1975-2004/Jan W1
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File 239: Mathsci 1940-2004/Mar
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Set	Items	Description
S1	944237	LATTICE? ? OR LATICE? ?
S2	164265	BASES OR BASIS
S3	28437	S2(5N)(LONG??? OR LARGE??)
S4	11718	S2(5N)(SMALL??? OR SHORT???)
S5	140205	(DIGITAL? OR ELECTRONIC?)(3N)(SIGN??? OR SIGNATURE? ?)
S6	14873	PUBLIC()KEY? ? OR (ASYMMETRIC? OR TWO(W)KEY? ?)(3N)(CRYPT? OR CIPHER? OR CYPHER? OR ENCRYPT? OR ENCIPHER? OR ENCYPER? OR ENCOD? OR SCRAMBL?)
S7	166735	CRYPTO? OR CRYPTANALY? OR CIPHER? OR CYPHER? OR ENCRYPT? OR ENCIPHER? OR SCRAMBL? OR DECRYPT? OR DECIPHER? OR UNENCRYPT? OR UNSCRAMBL?
S8	34420	S1 AND S2
S9	408	S1 AND S3
S10	307	S1 AND S4
S11	26	S9 AND S10
S12	16	RD (unique items)
S13	1	S1 AND S5
S14	116	(DIGITAL? OR ELECTRONIC?)(3N)(SIGN OR SIGNS OR SIGNED OR S- IGNING OR SIGNER OR SIGNATURE? ?)
S15	108	S1 AND S14
S16	73	RD (unique items)
S17	66	S16 NOT NTRU
S18	64	S17 NOT KNAPSACK
S19	7	S2 AND S18
S20	57	S18 NOT S19
S21	7	S20 AND S6
S22	50	S20 NOT S21
S23	36551	(TWO OR DUAL? OR TWIN OR MULTIPL? OR PLURAL? OR DIFFERENT)- (5W)S1
S24	4	S22 AND S23
S25	46	S22 NOT S24
S26	0	S3:S4 AND S25

S27	253	S1 AND S6
S28	52	S2 AND S27
S29	5	S3:S4 AND S28
S30	52	S28:S29
S31	40	RD (unique items)
S32	39	S31 NOT (S12 OR S18)
S33	2	S23 AND S32
S34	7	S29 OR S33
S35	5	RD (unique items)
S36	26	S32 NOT (S35 OR NTRU OR KNAPSACK)
S37	1720	AU=(DWORK, C? OR DWORK C? OR SAHAI, A? OR SAHAI A? OR GOLD- REICH, O? OR GOLDREICH O? OR AJTAI, M? OR AJTAI M?)
S38	1839	DWORK OR SAHAI OR GOLDREICH OR AJTAI
S39	30	S36 AND S37:S38
S40	230	S36 NOT S39
S41	31	S3:S4 AND S23
S42	16	RD (unique items)
S43	37	S23 AND S7
S44	25	RD (unique items)
S45	210	S44 NOT (S12 OR S18 OR S35 OR S36 OR S42)
S46	1	S1 AND S3:S4 AND S7
S47	10	RD (unique items)
S48	70	S47 NOT (S12 OR S18 OR S35 OR S36 OR S42 OR S45)

File 348:EUROPEAN PATENTS 1978-2004/Feb W05

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File 349:PCT FULLTEXT 1979-2002/UB=20040304,UT=20040226

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Set	Items	Description
S1	142095	CONTROL(1W)(SIGNAL? ? OR DATA OR INFORMATION OR HEADER? ? - OR BIT? ? OR BYTE? ? OR PACKET? ? OR FRAME? ? OR DATAFRAME? ? OR DATAGRAM? ? OR MESSAGE? ? OR BEAM? ? OR TEXT OR CHARACTER? ? OR STRING? ? OR NUMBER? ? OR CODE? ?)
S2	156085	KEY? ?
S3	706	S1(10N)S2(10N)(DECRYPT? OR DECIPHER? OR DECYPHER? OR UNENC- IPHER? OR UNENCRYPT? OR UNCIPHER? OR UNLOCK? OR ENCRYPT? OR E- NCIPHER? OR ENCYPER?)
S4	497	S1(10N)S2(10N)(CIPHER? OR CYPHER? OR SCRAMBL? OR ENCOD? OR DECOD??? OR UNSCRAMBL? OR DESCRAMBL??? OR UNENCOD? OR UNCOD?)
S5	48878	(OPTIC? OR RECORD??? OR REMOVABLE)(1W)(MEDIA OR MEDIUM)
S6	399388	DISC? ? OR DISK? ? OR DISKETTE?? OR CDROM?? OR CD? ? OR CDR OR CDRW OR DVD?? OR DVDROM?? OR DVDDRAM?? OR DIVX OR MINIDISK? ? OR MINIDISC? ? OR CASSETTE? ? OR TAPE OR TAPES OR DAT OR D- ATS OR FLOPPY OR FLOPPIES
S7	694332	(CABLE OR SATELLITE)(1W)(SIGNAL? ? OR TRANSMISSION? ? OR T- RANSMIT? OR COMMUNICAT? OR RECEIVER? ?) OR TV OR TELEVISION OR VIDEO? OR MOVIE? ? OR FILM? ? OR IMAGE? ?
S8	13299	SETTOP? ? OR SET()TOP? ? OR CABLE(1W)(DEVICE? ? OR UNIT? ? OR APPARATUS?? OR MODULE? ? OR EQUIPMENT OR HARDWARE OR MACHI- NE OR BOX OR BOXES OR DECODER? ? OR TRANSCEIVER? ? OR TERMINA- L? ?)
S9	357	S3:S4(50N)S5:S8
S10	48	S3:S4(50N)S5
S11	101536	CONTROL()SIGNAL? ?
S12	309	S9 NOT S10
S13	94	S12(50N)S11
S14	15	S13/TI,AB,CM
S15	79	S13 NOT S14
S16	18	S15 AND IC=G06F
S17	61	S15 NOT S16

14/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00543500

Method and apparatus for encrypting a set of message signals
Verfahren und Anordnung zur Verschlüsselung von Informationssignalen
Procede et dispositif de chiffage des signaux de message

PATENT ASSIGNEE:

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INVENTOR:

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Buckley, Christopher Simon Thirsk et al (28912), Lucent Technologies (UK)
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PATENT (CC, No, Kind, Date): EP 532226 A2 930317 (Basic)
EP 532226 A3 940413
EP 532226 B1 000308

APPLICATION (CC, No, Date): EP 92307998 920903;

PRIORITY (CC, No, Date): US 759312 910913

DESIGNATED STATES: DE; FR; GB; SE

INTERNATIONAL PATENT CLASS: H04L-009/08; H04L-009/32

ABSTRACT WORD COUNT: 170

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200010	724
CLAIMS B	(German)	200010	659
CLAIMS B	(French)	200010	806
SPEC B	(English)	200010	6290
Total word count - document A			0
Total word count - document B			8479
Total word count - documents A + B			8479

...ABSTRACT speech and the same or other portion of the created shared
secret datum is used as an input to a process for creating a second
encryption key. That **key** is employed in the mobile customer unit to
encode those of the **control signals** generated by the mobile customer
unit that affect the nature of the call in progress. (see **image** in
original document)

14/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00339634

Video conference arrangement.

Videokonferenzeinrichtung.

Dispositif de videoconference.

PATENT ASSIGNEE:

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Frankfurt/Main, (DE), (applicant designated states:
AT;BE;CH;ES;FR;GB;IT;LI;LU;NL)

INVENTOR:

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Loos, Rolf, Dipl.-Ing., Ulmenweg 4, W-6115 Munster, (DE)

PATENT (CC, No, Kind, Date): EP 349709 A2 900110 (Basic)
EP 349709 A3 900228
EP 349709 B1 930526

APPLICATION (CC, No, Date): EP 89105328 890325;

PRIORITY (CC, No., Date): DE 3823219 880708
DESIGNATED STATES: AT; BE; CH; ES; FR; GB; IT; LI; LU; NL
INTERNATIONAL PATENT CLASS: H04N-007/15;
TRANSLATED ABSTRACT WORD COUNT: 155
ABSTRACT WORD COUNT: 130
LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1797
CLAIMS B	(German)	EPBBF1	2275
CLAIMS B	(French)	EPBBF1	1835
SPEC B	(German)	EPBBF1	3701
Total word count - document A			0
Total word count - document B			9608
Total word count - documents A + B			9608

...CLAIMS which performs a comparison with the output signals of a first address generator (AG1) operated synchronously with the frame change and on agreement generates a **control signal** for a second address generator (AG2) and that the second address generator (AG2) operated synchronously with the frame change drives the cursor generator (CG).

10. **Video** conference equipment according to one of the claims 1 to 9, characterised thereby, that the **control signal**, which is generated by the first comparator (VG1), releases a second comparator (VG2), which compares the output signal of the **control signal decoder** (SD), which was for example produced by the control **key** of the digital position transmitter, with the output signal of the overlay generator (OG) and, on agreement, a signal for the control equipment (MS) is generated by the second comparator, wherein the selected function is identified by that signal,
11. **Video** conference equipment according to one of the claims 1 to 10, characterised thereby, that the picture storage device (BS) is formed of two picture dot...

14/3,K/3 (Item 3 from file: 348)
FIALOG(R)File 348:EUROPEAN PATENTS
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00309363

Aircraft service systems and methods.

Dienststellenanlage für Flugzeug.

Reseau de service pour avion.

PATENT ASSIGNEE:

SONY CORPORATION, (214021), 7-35 Kitashinagawa 6-chome Shinagawa-ku,
Tokyo 141, (JP), (applicant designated states: AT;DE;ES;FR;GB;IT;NL)

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LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 282183 A1 880914 (Basic)
EP 282183 B1 920909

APPLICATION (CC, No, Date): EP 88301318 880217;

PRIORITY (CC, No, Date): JP 8739772 870223

DESIGNATED STATES: AT; DE; ES; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B64D-011/00;

ABSTRACT WORD COUNT: 188

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS B	(English)	EPBBF1	2736
CLAIMS B	(German)	EPBBF1	1251
CLAIMS B	(French)	EPBBF1	1644
SPEC B	(English)	EPBBF1	6228
Total word count - document A			0
Total word count - document B			11859
Total word count - documents A + B			11859

...CLAIMS encoded control signals to the decoder means (205), and wherein the decoder means (205) is capable of decoding said encoded audio signals and said encoded **control** signals, means (61) for displaying the demodulated and decoded video signals, and an audio output terminal for receiving the demodulated and decoded audio signals.

11 is capable of encoding said **television game** software, said modulator means (161 to 167) is capable of modulating said **television game** software, and said multiplexing means (168) is capable of multiplexing said **encoded television game** software with the modulated **video** signals, **encoded** audio signals, and **encoded control signals**, and wherein **each** terminal unit (200) comprises means (204) for demodulating the **television game** software, and means (209) for processing the demodulated and **decoded television game** software.

12. A system according to claim 10 or claim 11, wherein each terminal unit (200) includes a panel (206) in which the attendant...

14/3,K/4 (Item 4 from file: 348)
 DIALOG(R) File 348:EUROPEAN PATENTS
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00308774

Service and entertainment communication system.
 Dienst- und Unterhaltungsnachrichtensysteme.
 Systemes de communication pour service et divertissement.

PATENT ASSIGNEE:

SONY CORPORATION, (214021), 7-35 Kitashinagawa 6-chome Shinagawa-ku, Tokyo 141, (JP), (applicant designated states: AT;DE;ES;FR;GB;IT;NL)

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PATENT (CC, No, Kind, Date): EP 277014 A2 880803 (Basic)
 EP 277014 A3 910626
 EP 277014 B1 950920

APPLICATION (CC, No, Date): EP 88300723 880128;

PRIORITY (CC, No, Date): JP 8719981 870130

DESIGNATED STATES: AT; DE; ES; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: H04N-007/18;

ABSTRACT WORD COUNT: 103

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1343
CLAIMS B	(English)	EPAB95	1088
CLAIMS B	(German)	EPAB95	886
CLAIMS B	(French)	EPAB95	1298
SPEC A	(English)	EPABF1	5402
SPEC B	(English)	EPAB95	5080
Total word count - document A			6745

Total word count - document B 8352
Total word count - documents A + B 15097

...CLAIMS of said multiplexed, modulated video signals and encoded audio signals, tuner means (33, 34) coupled to the selecting means for receiving and demodulating said selected **video** signals and encoded audio signals, a decoder means (36) for decoding said selected encoded audio signals, a display means (35a) for displaying the selected video signals, and an audio output terminal (35b) for receiving the selected **decoded** audio signals;
characterised in that:
the head end apparatus also includes means (9) for storing television game software signals and a **key** (5c; 5d) activation of which generates a **control signal** (SC1, SC2), the **encoder** means (6, 7) is capable of digitally **encoding** the **television** game software signals, the modulator means (11) is capable of modulating the **television** game software signals in a channel of a respective frequency band, and the multiplexing means (12) is capable of multiplexing the modulated **television** game software signals and the **control signal** (SC1, SC2) with the modulated **video** signals and the modulated audio signals; and
the tuner means (33) of each terminal unit (30) is capable of receiving and demodulating the multiplexed television game software signals and the **control signal** (SC1, SC2), the decoder means (36) of each terminal unit (30) is capable of decoding the digitally encoded television game software signals, and each terminal...

14/3,K/5 (Item 5 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00143044

Method of, and apparatus for, scrambling a TV picture.
Verfahren und Vorrichtung zur Verschleierung eines Fernsehbildes.
Procédé et appareil pour brouiller une image de television.
PATENT ASSIGNEE:

SONY CORPORATION, 7-35 Kitashinagawa 6-Chome Shinagawa-ku, Tokyo 141,
(JP), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

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PATENT (CC, No, Kind, Date): EP 134655 A2 850320 (Basic)
EP 134655 A3 861126

APPLICATION (CC, No, Date): EP 84304654 840706;

PRIORITY (CC, No, Date): JP 83123615 830707

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: H04N-007/16;

ABSTRACT WORD COUNT: 126

LANGUAGE (Publication,Procedural,Application): English; English; English

...ABSTRACT a predetermined time interval independently of the scene change portion. The scrambled signal is generated by detecting a change in the scene represented by the **television** signal and generating a scene change identification signal in response thereto;
generating a **key** code signal having a predetermined pattern;
combining said scene change identification signal and said **key** code signal to produce said first **control signal** ;

producing said second **control signal** ; and
scrambling the **television signal** in response to said first **control signal** or said second **control signal** .

14/3,K/6 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01028935 **Image available**

METHOD AND SYSTEM FOR VIDEO AND AUXILIARY DATA TRANSMISSION OVER A SERIAL LINK

PROCEDE ET SYSTEME DE TRANSMISSION DE DONNEES VIDEO ET AUXILIAIRES VIA UNE LIAISON SERIE

Patent Applicant/Assignee:

SILICON IMAGE INC, 1060 East Arques Avenue, Sunnyvale, CA 94085, US, US
(Residence), US (Nationality)

Inventor(s):

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HWANG Seung Ho, 1690 Edgewood Drive, Palo Alto, CA 94303, US,
JUNG Keewook, 900 Pepper Tree Lane #1524, Santa Clara, CA 95051, US,
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Legal Representative:

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Montgomery Street, San Francisco, CA 94104, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200358946 A2-A3 20030717 (WO 0358946)

Application: WO 2002US38766 20021205 (PCT/WO US02038766)

Priority Application: US 200136234 20011224; US 200295422 20020312; US
2002171860 20020614; US 2002192296 20020710

Designated States: CA JP KR

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK
TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 57576

Image Availability:

Claim

... and the output circuitry are configured to undergo transitions between the mute state and the transmission state only during control data periods in response to **control signals** received at the at least one input of the first circuitry, and the control data periods neither coincide with nor overlap any of the data islands or any of the active **video** periods. 130. The receiver of claim 129, wherein the first circuitry includes at least one register and is configured ...least one mute state entry bit in the register in response to a mute state entry signal received at the at least one input, the **decryption** circuitry is operable in the transmission state to undergo a transition to the mute state in response to receipt of **decryption control data** at the at least one input of the first circuitry during one of the **control data** periods at a time when the mute state entry bit has been set, and the **decryption** circuitry is operable in the transmission state to initiate a **key** calculation operation in response to receipt of the **decryption control data** at the at least one input of the first circuitry during one of the **control data** periods at a time when the 1 5 mute state entry bit has not been set. 13 1. The receiver of claim 13

0, wherein...

14/3,K/7 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00818994 **Image available**

CONDITIONAL ACCESS AND SECURITY FOR VIDEO ON-DEMAND SYSTEMS
ACCES CONDITIONNEL A DES SYSTEMES VIDEO SUR DEMANDE ET SECURITE ASSOCIEE
Patent Applicant/Assignee:

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US (Residence), US (Nationality)

Inventor(s):

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Legal Representative:

SUEOKA Greg T (et al) (agent), Fenwick & West LLP, Two Palo Alto Square,
Palo Alto, CA 94306, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200152543 A1 20010719 (WO 0152543)

Application: WO 2001US1173 20010112 (PCT/WO US0101173)

Priority Application: US 2000483066 20000114

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7086

Fulltext Availability:

Claims

Claim

... content;

a multiplexer/scrambler for multiplexing a plurality of signal and
generating video

streams, the multiplexer/scrambler coupled to the content server and
responsive to **control signals**; and

a session manager for controlling the **video** content provided by the
content server and its transmission, the session manager coupled to the
video content server and the multiplexer/scrambler.

28 The system of claim 26, further comprising a conditional access system
coupled to the session manager and the multiplexer/ **scrambler**, the
conditional access system providing **control signals**, **encryption**
keys and authorization messages to the multiplexer/ **scrambler** in
response to signals from the session manager.

29 The system of claim 28, wherein the conditional access system uses ECM
to send **control signals** to the subscriber stations.

30 The system of claim 28, wherein the conditional access system uses the
same ECM having the same key for the...

14/3,K/8 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00782294 **Image available**

REMOTE CONTROL SYSTEM FOR AUDIO AND VIDEO CONTENT
SYSTEME DE TELECOMMANDE POUR CONTENU AUDIO ET VIDEO
Patent Applicant/Assignee:

WARNER MUSIC GROUP INC, 1400 East Lackawanna Avenue, Olyphant, PA 18447,
US, US (Residence), US (Nationality)

Inventor(s):

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LYDECKER George H, 827 North Ontario Street, Burbank, CA 91505-3012, US,

Legal Representative:

RACKMAN Michael I (et al) (agent), Gottlieb, Rackman & Reisman PC, 270
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200115428 A1 20010301 (WO 0115428)

Application: WO 2000US23082 20000823 (PCT/WO US0023082)

Priority Application: US 99382537 19990825

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3650

English Abstract

...distributed either fixed in a media or electronically, (i.e., via private network, the Internet, etc.). At the receiver, the receiver first detects the release **control signal** (step 114) and then replays the program at will. The program may include a time stamp in which case the receiver cannot replay the program until a control indicative of a current time/date corresponding to the date stamp. Alternatively, the program can be **encrypted** in which case the release **control signal** includes the **decryption key** (step 120). The release control can be broadcast over a **TV** channel, a radio channel and so on and is preferably imbedded into the signals of the standard **TV** or radio signals.

14/3,K/9 (Item 4 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00741134 **Image available**

METHOD FOR INTERFACING TELEVISION TO A MULTICAST NETWORK

PROCEDE PERMETTANT D'INTERFACER UN POSTE DE TELEVISION ET UN RESEAU A PLUSIEURS DESTINATAIRES

Patent Applicant/Inventor:

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(Nationality)

Legal Representative:

WILKIE Andrew Arthur, Knowles & Associates, Level 10, Price Waterhouse
KPMG, 66 Wyndham Street, Auckland, NZ

Patent and Priority Information (Country, Number, Date):

Patent: WO 200054499 A1 20000914 (WO 0054499)

Application: WO 2000NZ25 20000309 (PCT/WO NZ0000025)

Priority Application: NZ 334026 19990309

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK

LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 4127

Fulltext Availability:
Claims

Claim

... to modify the output thereof.

2 Apparatus as claimed in claim 1 wherein the receiver means includes a television remote control transmitter to provide the **control signal** to a remote control receiver of the television receiver.

3 Apparatus as claimed in claim 2 wherein the receiver means also includes a remote control receiver to receive signals from the remote control transmitter of the **television** receiver.

4 Apparatus as claimed in claim 1 wherein the information server means broadcasts the information over the Internet using multicast protocol.

5 Apparatus as claimed in claim 1 wherein the information broadcast by the information server means is **encrypted** and requires a **key** to be deciphered.

6 Apparatus as claimed in claim 1 wherein the **control signal** causes the audio output of the **television** receiver to change from an active state to a mute state. . Apparatus as claimed in claim 1 wherein the **control signal** causes the audio output of the **television** receiver to change from a mute state to an active state.

8 Apparatus as claimed in claim 1 wherein the **control signal** causes the channel to which the television receiver is tuned to change to another channel.

9 Apparatus as claimed in claim 8 wherein the other...

...control signal to the television receiver to modify the output thereof.

12 A method as claimed in claim 11 including the step of providing the **control signal** to a remote control receiver of the television receiver.

13 A method as claimed in claim 12 including the step of receiving signals from the remote control transmitter of the **television** receiver.

14 A method as claimed in claim 11 including the step of broadcasting the information over the Internet using multicast protocol.

15 A method as claimed in claim 11 including the step of encrypting the broadcast information whereby a **key** is required to **decipher** the information.

16 A method as claimed in claim 11 wherein the step of providing the **control signal** comprises the step of causing the audio output of the **television** receiver to change from an active state to a mute state.

17 A method as claimed in claim 11 wherein the step of providing the **control signal** comprises the step of causing the audio output of the **television** receiver to change from a mute state to an active state.

18 A method as claimed in claim 11 wherein the step of providing the **control signal** comprises the step of causing the channel to which the television receiver is tuned to change to another channel.

19 A method as claimed in...

14/3,K/10 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00288854 **Image available**

TRANSMISSION OF DATA USING FULL FRAME VIDEO

TRANSMISSION DE DONNEES FAISANT APPEL A DES IMAGES VIDEO COMPLETES

Patent Applicant/Assignee:

YUEN Henry C,

Inventor(s):

YUEN Henry C,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9507003 A1 19950309

Application: WO 94US9857 19940902 (PCT/WO US9409857)

Priority Application: US 93117579 19930903

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES

FI FR GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL

PT RO RU SD SE SI SK SK TJ TT UA US UZ VN KE MW SD AT BE CH DE DK ES FR

JP KR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 11061

Fulltext Availability:

Claims

Claim

... to a first video program.

4 The video system of claim 3 wherein said auxiliary information includes information relating to programming schedule of a second video program.

5 A remote controller for operating a video system, said video system having a receiver receiving a first program of broadcast video signals, said broadcast video signal including a video image, the remote controller comprising:

a plurality of keys ;

an interface circuit for generating remote control signals to said video system; and

a control circuit responsive to actuation of one or more said keys for triggering said circuit to generate remote control signals to said video system

and causing said video system to decode signals from said video image to

manage operation of the video system.

6 The remote controller of claim 5 wherein said control circuit comprises means responsive to actuation of a key for causing said video system to decode from said video image representing the broadcast schedule information of a second program related to said first program. The remote controller of claim 6 wherein said broadcast information...

14/3,K/11 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00268269

ENHANCING OPERATIONS OF VIDEO TAPE CASSETTE PLAYERS

PERFECTIONNEMENT DU FONCTIONNEMENT DE LECTEURS DE CASSETTE VIDEO

Patent Applicant/Assignee:

YUEN Henry C,

KWOH Daniel S,

MANKOVITZ Roy J,

HINDMAN Carl,

NGAI Hing Y,

Inventor(s):

YUEN Henry C,

KWOH Daniel S,

MANKOVITZ Roy J,

HINDMAN Carl,

NGAI Hing Y,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9416441 A1 19940721

Application: WO 94US173 19940105 (PCT/WO US9400173)

Priority Application: US 931125 19930105; US 9314541 19930208
Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR
KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN AT BE CH DE DK
ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD
TG
Publication Language: English
Fulltext Word Count: 76305

Fulltext Availability:
Claims

Claim

... signals suitable for storage into said predetermined interval on said tape.

27 71be video player as in claim 26, wherein said predetermined interval on said **tape** is a vertical blanking interval.

28 A remote controller for operating a video cassette player, said video cassette player having receiver receiving a first program of broadcast video signals, said broadcast video signal include a vertical blanking interval (VBI), the remote controller comprising:
a plurality of **keys** ,
an interface circuit for generating remote **control signals** to said video **cassette** player, a control circuit responsive to activation of one or more of said **keys** for triggering said circuit to generate remote **control signals** to said **video cassette** player and causing said **video cassette** player to **decode** signals from said VBI to manage operation of the **cassette** player.

29 A remote controller as in claim 28, wherein said control circuit comprises means for causing said **video cassette** player to decode from said VBI signals representing a title of said **video** signals.

30 A remote controller as in claim 28, wherein said control circuit comprises means responsive to activation of a key for causing said video ...

14/3,K/12 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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INFO **Image available**
A CONTROL AND COMMUNICATION SYSTEM, A RADIO RECEIVER AND A CONTROL AND COMMUNICATION METHOD
SYSTEME DE COMMANDE ET DE COMMUNICATION, RECEPTEUR RADIO ET PROCEDE DE COMMANDE ET DE COMMUNICATION

Patent Applicant/Assignee:
FLEX PRODUCTS A S,
NIELSEN Ejlif,
MOLLER Nicolai Kristian,
HANSEN Erik,

Inventor(s):
NIELSEN Ejlif,
MOLLER Nicolai Kristian,
HANSEN Erik,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9113523 A1 19910905
Application: WO 91DK39 19910211 (PCT/WO DK9100039)
Priority Application: DK 35390 19900209

Designated States: AT AU BE BR CA CH DE DK ES FI FR GB GR HU IT JP KR LU NL
NO PL RO SE SU US

Publication Language: English
Fulltext Word Count: 13075

Fulltext Availability:

Claims

Claim

... communication system according to claim

14 said encryption means performing a static and/or dynamic encryption routine by employing a static and/or dynamic **encryption key**, a static and/or dynamic **encryption** algorithm, a combination of said **control signal** or **control signals** and a dynamic, time-varying function or a combination thereof, and said **decryption** means performing a corresponding static and/or dynamic **decryption** routine.

16a A control and communication system according to any one of the preceding claims, said radio transmitter and said radio receiver(s) forming part of a microwave communication system or an earth-satellite/ **satellite** -earth **communication** system.

17o A control and communication system according to any one of the preceding claims, said **control signal** or signals, and/or said receiver signal or signals, and/or said fold back signal or signals being signals selected from the group consisting of...

14/3,K/13 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00194533

EXTERNAL SECURITY MODULE FOR A TELEVISION SIGNAL DECODER

MODULE DE SECURITE EXTERNE POUR DECODEUR DE SIGNAUX DE TELEVISION

Patent Applicant/Assignee:

SCIENTIFIC-ATLANTA INC,

Inventor(s):

GAMMIE Keithy Beverly,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9111884 A1 19910808

Application: WO 91US501 19910130 (PCT/WO US9100501)

Priority Application: US 90442 19900201

Designated States: AT AU BE BR CA CH DE DK ES FR GB GR IT JP KR LU NL SE

Publication Language: English

Fulltext Word Count: 11105

Fulltext Availability:

Claims

Claim

... key

decryption on said twice-encrypted key using a first secret serial number and outputting a partially decrypted key,
connector means, coupled to said **key** decryptor means for connecting said **decoder** to a replaceable security module, through which connector means said partially **decrypted key** is transmitted to said replaceable security module and a **descrambling control signal** is received from said replaceable security module,
signal **descrambling** means, coupled to said connector means and receiving said **descrambling control signal** for descrambling said signal and outputting a descrambled signal.

50 The decoder of claim 65, wherein said signal is a television signal,

51 The decoder of claim 65, wherein said **television** signal is a B-MAC type **television** signal,

52 The decoder of claim 65, wherein said scrambled signal and said twice-encrypted key signal have been multiplexed together

prior to reception by...

14/3,K/14 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00156314

SIGNAL PROCESSING APPARATUS AND METHODS
DISPOSITIF ET PROCEDES DE TRAITEMENT DE SIGNAUX

Patent Applicant/Assignee:

HARVEY John C,

Inventor(s):

HARVEY John C,

CUDDIHY James W,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8902682 A1 19890323

Application: WO 88US3000 19880908 (PCT/WO US8803000)

Priority Application: US 8796 19870911

Designated States: AT AU BE BJ BR CF CG CH CM DE DK FI FR GA GB HU IT JP
KI KR LU MC MG ML MR MW NL NO RO SE SN SU TD TG

Publication Language: English

Fulltext Word Count: 161690

Fulltext Availability:

Claims

Claim

... content and a

user specific signal to one or more associated output devices, with at least some of said computers being programmed to process modification **control signals** so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user...information content and user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification **control signals** so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user...address, control, and coordinate diverse apparatus, and-the nature and extent of the apparatus installed at any given station can vary greatly. SPAM signals **control** not only various kinds of receivers and tuners; transmission switches and channel processors; computers; printers and video and audio display apparatus; and video, audio, and digital communications transmission recorders but,also signal processor system apparatus including **decoders ; decryptors ; control signal** switching apparatus; and the communications meters, called signal processors, of the present invention. Besides apparatus for communicating programming to viewers, SPAM signals also address and **control** subscriber station control apparatus such as, for example, furnace control units whose operations are automatic and are improved with improved information and subscriber station...

14/3,K/15 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00144580

Image available

METHOD AND APPARATUS FOR COMMUNICATION OF VIDEO, AUDIO, TELETEXT, AND DATA
TO GROUPS OF DECODERS IN A COMMUNICATION SYSTEM

PROCEDE ET APPAREIL DE COMMUNICATION VIDEO, AUDIO, DE TELETEXTES ET DE
DONNEES A DES GROUPES DE DECODEURS DANS UN SYSTEME DE COMMUNICATION

Patent Applicant/Assignee:

SCIENTIFIC ATLANTA INC,

Inventor(s):

SETH-SMITH Nigel,

BATES Cameron,

LIM Samson,

VAN RASSEL William,

YONEDA Robert,

LUCAS Keith,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8801463 A1 19880225

Application: WO 87US1983 19870814 (PCT/WO US8701983)

Priority Application: US 86261 19860814

Entered States: AT AU BE CH DE DK FI FR GB IT JP LU NL NO SE

Publication Language: English

Abstract Word Count: 25000

English Abstract

...communication system enabling transmission of individual subscriber teletext messages (12), audio and video to individual subscribers (300a, 300b, 300c) and permitting group communications of audio, **video**, teletext and data information from a single central subscriber location (302), such as a corporate head office to a plurality of satellite offices, such as field or sales offices of the corporation. A composite signal including the information to be transmitted as well as system wide, individual **decoder** and group **decoder control signals** is transmitted. The system-wide **control signals** include data germane to operation of each of the **decoders** (24) of this system, including **key** information needed to **decode** the composite signal.

File 8: Ei Compendex(R) 1970-2004/Feb W5
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 File 94: JICST-EPlus 1985-2004/Feb W5
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 File 144: Pascal 1973-2004/Feb W5
 (c) 2004 INIST/CNRS
 File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec
 (c) 1998 Inst for Sci Info
 File 34: SciSearch(R) Cited Ref Sci 1990-2004/Feb W5
 (c) 2004 Inst for Sci Info
 File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Feb
 (c) 2004 The HW Wilson Co.
 File 583: Gale Group Globalbase(TM) 1986-2002/Dec 13
 (c) 2002 The Gale Group
 File 266: FEDRIP 2004/Jan
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 File 95: TEME-Technology & Management 1989-2004/Feb W4
 (c) 2004 FIZ TECHNIK
 File 248: PIRA 1975-2004/Feb W4
 (c) 2004 Pira International

Set	Items	Description
S1	201995	CONTROL(1W)(SIGNAL? ? OR DATA OR INFORMATION OR HEADER? ? - OR BIT? ? OR BYTE? ? OR PACKET? ? OR FRAME? ? OR DATAFRAME? ? OR DATAGRAM? ? OR MESSAGE? ? OR BEAM? ? OR TEXT OR CHARACTER? ? OR STRING? ? OR NUMBER? ? OR CODE? ?)
S2	687500	KEY? ?
S3	15	S1(10N)S2(10N)(DECRYPT? OR DECIPHER? OR DECYPHER? OR UNENC- IPHER? OR UNENCRYPT? OR UNCIPHER? OR UNLOCK? OR ENCRYPT? OR E- NCIPHER? OR ENCYPER?)
S4	16	S1(10N)S2(10N)(CIPHER? OR CYPHER? OR SCRAMBL? OR ENCOD? OR DECOD??? OR UNSCRAMBL? OR DESCRAMBL??? OR UNENCOD? OR UNCOD?)
S5	29367	(OPTIC? OR RECORD??? OR REMOVABLE)(1W)(MEDIA OR MEDIUM)
S6	1245194	DISC? ? OR DISK? ? OR DISKETTE?? OR CDROM?? OR CD? ? OR CDR OR CDRW OR DVD?? OR DVDROM?? OR DVDDRAM?? OR DIVX OR MINIDISK? ? OR MINIDISC? ? OR CASSETTE? ? OR TAPE OR TAPES OR DAT OR D- ATS OR FLOPPY OR FLOPPIES
S7	4385807	(CABLE OR SATELLITE)(1W)(SIGNAL? ? OR TRANSMISSION? ? OR T- RANSMIT? OR COMMUNICAT? OR RECEIVER? ?) OR TV OR TELEVISION OR VIDEO? OR MOVIE? ? OR FILM? ? OR IMAGE? ?
S8	6386	SETTOP? ? OR SET()TOP? ? OR CABLE(1W)(DEVICE? ? OR UNIT? ? OR APPARATUS?? OR MODULE? ? OR EQUIPMENT OR HARDWARE OR MACHI- NE OR BOX OR BOXES OR DECODER? ? OR TRANSCEIVER? ? OR TERMINA- L? ?)
S9	29	S3:S4
S10	27	RD (unique items)
S11	8	S10 AND S5:S8
S12	13	S10:S11 NOT PY=1996:2004

12/5/1 (Item 1 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
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04279554 E.I. No: EIP95112910167

Title: Product codes and private-key encryption
Author: Campello de Souza, J.; Campello de Souza, R.M.
Corporate Source: UFPE, Recife, Braz
Conference Title: Proceedings of the 1995 IEEE International Symposium on Information Theory
Conference Location: Whistler, BC, Can Conference Date: 19950917-19950922
Sponsor: IEEE
E.I. Conference No.: 43852
Source: IEEE International Symposium on Information Theory - Proceedings 1995. IEEE, Piscataway, NJ, USA, 95CB35738. p 489
Publication Year: 1995
CODEN: PISTFZ
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9512W4

Abstract: In this paper the use of product codes cryptographic purposes is discussed. The codes are used in a scheme that applies a special type of structured errors that, as far as we know, do not exist in any real communication channel. Although this fact seems of no importance, since the errors in any error-correcting code based cryptosystem are artificially generated at the transmitter, its use allows an improvement in the security level in comparison with similar schemes. (Author abstract) 2 Refs.

Descriptors: *Cryptography; Codes (symbols); Communication channels (information theory); Error correction; Coding errors; Transmitters; Security of data; Vectors; Matrix algebra

Identifiers: Private- key encryption ; Burst-correcting product codes; Error control codes

Classification Codes:
723.1 (Computer Programming); 716.1 (Information & Communication Theory); 723.2 (Data Processing); 921.1 (Algebra)
723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment); 921 (Applied Mathematics)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS)

12/5/2 (Item 2 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
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04279554 E.I. No: EIP94112445344

Title: Array codes for private-key encryption
Author: Campello de Souza, R.M.; Campello de Souza, J.
Corporate Source: Communications Research Group - CODEC, Recife, Braz
Source: Electronics Letters v 30 n 17 Sept 18 1994. p 1394-1396
Publication Year: 1994
CODEN: ELLEAK ISSN: 0013-5194
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review); T; (Theoretical)
Journal Announcement: 9501W2

Abstract: A new technique for private-key encryption, which is based on single burst-correcting array codes, is introduced. The method makes use of the fact that the class of array codes considered is single random-error-correcting and single burst-correcting with a burst length that can be made arbitrarily large. (Author abstract) 5 Refs.

Descriptors: *Codes (symbols); Error correction; Cryptography; Encoding (symbols); Random processes; Algorithms; Boolean algebra

Identifiers: Array codes; Private key encryption ; Error control codes ; Burst correcting error codes

Classification Codes:
723.2 (Data Processing); 921.6 (Numerical Methods); 922.1 (Probability

Theory); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 921.1 (Algebra)

723 (Computer Software); 921 (Applied Mathematics); 922 (Statistical Methods); 721 (Computer Circuits & Logic Elements)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

12/5/3 (Item 3 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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02764560 E.I. Monthly No: EI8907059974

Title: **Personal identification number generation using fingerprint.**

Author: del Rosario, Noel; Komatsu, Naoshisa; Tominaga, Hideyoshi

Corporate Source: Waseda Univ, Tokyo, Jpn

Conference Title: IEEE 1988 International Symposium on Information Theory

- Abstracts of papers

Conference Location: Kobe, Jpn Conference Date: 19880619

Sponsor: IEEE, Information Theory Group, New York, NY, USA; Inst of Electronics, Information & Communication Engineers of Japan, Jpn

E.I. Conference No.: 12027

Source: IEEE 1988 Int Symp on Inf Theory Abstr of Pap v 25 n 13. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (cat n 38CH2621-1) Piscataway, NJ, USA. p 231

Publication Year: 1988

Language: English

Document Type: PA; (Conference Paper) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8907

Abstract: Summary form only given, as follows. Human identification for system security is an important subject, and one solution for keeping the system security is the use of a PIN (personal identification number). The manner of obtaining this PIN which a third party cannot forge and the means of using this PIN as **key** for access **control** or **data encryption** and the likes are of great interest. The authors propose a new concept of generating a PIN. This is a round-scanning scheme of a fingerprint **image** to extract a sequence from the pattern. Round-scanning is flexible for matching **images** at different axes of orientation because simply shifting the scanned data in effect rotates the **image** being compared so it has the same axis of orientation as the other one. The authors also proposed a PIN generating process using the characteristics of round-scanned data.

Descriptors: DATA PROCESSING--Security of Data; **IMAGE** PROCESSING--Image Analysis; PATTERN RECOGNITION SYSTEMS; CRYPTOGRAPHY

Identifiers: PERSONAL IDENTIFICATION NUMBER; SYSTEM SECURITY; FINGERPRINT **IMAGE** ; ABSTRACT ONLY

Classification Codes:

723 (Computer Software); 741 (Optics & Optical Devices)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

12/5/4 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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02689246 E.I. Monthly No: EIM8812-062388

Title: **TELEVISION SCRAMBLING AND ENCRYPTION - A SYSTEM OUTLINE.**

Author: Wright, D. T.

Conference Title: Colloquium on Encryption for Cable and DBS.

Conference Location: London, Engl Conference Date: 19860219

Sponsor: IEE, Electronics Div, London, Engl

E.I. Conference No.: 08682

Source: IEE Colloquium (Digest) n 1986/24. Publ by IEE, London, Engl p 2. 1-2. 4

Publication Year: 1986

CODEN: DCILDN

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8812

Abstract: Conditional Access for broadcast picture and sound signals involves scrambling the original form of the signals. The scrambling of the vision signal presents the major problem. The **scrambling** technique proposed for the MAC system is known as double-cut component rotation. **Descrambling control signals** are **encrypted** using a suitable algorithm so that only those in possession of the **key** are able to recover them in a meaningful form. The **descrambling control signal** consists of 16 bits for every **television** line, eight each for the chrominance and luminance cut-points. This data rate (250 kbit/s) is reduced by taking the cut point control information from a pseudo random binary sequence (prbs) generator which is reset at the start of each frame. 7 refs.

Descriptors: CRYPTOGRAPHY; **TELEVISION** BROADCASTING; INFORMATION THEORY --Digital Signals; **TELEVISION** --Subscriber Systems

Identifiers: **TELEVISION** SCRAMBLING; **TELEVISION** SIGNAL ENCRYPTION; DOUBLE-CUT COMPONENT ROTATION; PSEUDO RANDOM BINARY SEQUENCE GENERATOR; CONDITIONAL **TELEVISION** ACCESS

Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

12/5/5 (Item 5 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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01598779 E.I. Monthly No: EI8412128814 E.I. Yearly No: EI84022786

Title: KEYBOARD MAGIC.

Author: Hobaek, Halvor

Corporate Source: Univ of Bergen, Dep of Physics, Bergen, Norw

Source: Microcomputing v 7 n 10 Oct 1983 p 86-89

Publication Year: 1983

CODEN: MIRCDC

Language: ENGLISH

Journal Announcement: 8412

Abstract: Serious keyboard limitations, such as the lack of control characters, make the Commodore PET computer difficult to use as a terminal with a mainframe. Software modifications are introduced that can expand Keyboard uses by establishing one of the **keys** as a reset button and another as a control **key** which makes the complete set of **control characters** available. The hex-code programming is used to write a hexadecimal program to **decode** the CBM Keyboard.

Descriptors: *COMPUTER PERIPHERAL EQUIPMENT--*Computer Interfaces; COMPUTER PROGRAMS--Applications; CODES, SYMBOLIC--Decoding; COMPUTERS, MICROPROCESSOR

Identifiers: CONTROL CHARACTERS; HEX-CODE PROGRAMMING; CBM OPERATING SYSTEM; KEYBOARDS

Classification Codes:

722 (Computer Hardware); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

12/5/6 (Item 6 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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01531384 E.I. Monthly No: EI8406052130 E.I. Yearly No: EI84025221

Title: VIRTUAL PERSONAL COMPUTER.

Author: Fleming, Jim

Corporate Source: Unir Corp, Indianapolis, Indiana, USA

Source: Dr. Dobb's Journal v 9 n 2 Feb 1984 22p between p 32 and 59

Publication Year: 1984

CODEN: DDJSDM

Language: ENGLISH

Journal Announcement: 8406

Abstract: The Virtual Personal Computer (VPC) project is introduced as an effort to develop a general architecture and specification for a personal computer that can be integrated with networks and larger computer systems. Overall philosophies and basic architecture are discussed, including the

1-bit, asynchronous parity version, link layer, the multiplexed layer and encoding format, process (or) layer interfaces to the multiplexer, the uses interface with remote- control code , the virtual display device and control code , the virtual key -board and its code, directional, editing, control, function and exit keys and the virtual audio device. Four exercise programs are listed.

Descriptors: *COMPUTERS, MICROPROCESSOR--*Data Communication Systems; COMPUTER NETWORKS; COMPUTER ARCHITECTURE

Identifiers: VIRTUAL PERSONAL COMPUTER (VPC)

Classification Codes:

722 (Computer Hardware); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

12/5/7 (Item 1 from file: 202)

DIALOG(R)File 202:Info. Sci. & Tech. Abs.

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1200597

Cryptography using modular software elements.

Book Title: In American Federation Of Information Processing Societies. Afisp Conference Proceedings. Volume 45. 1976 National Computer Conference, June 7-10, 1976, New York. 1976. Afips Press, Montvale, New Jersey. P. 113-123. 8 Illus. 34 Ref. See Isa 77-012/y.

Author(s): Bright, Herbert S; Enison, Richard L

Corporate Source: Computation Planning, Inc., Bethesda, Maryland

Publication Date: 1976

Language: English

Document Type: Book Chapter

Record Type: Abstract

Journal Announcement: 1200

Protection of information within a computer/communication system can be provided through reversible cryptographic transformation of the information itself into a form than can be returned to usable form only through use of control information known as "key ." it is not necessary, in order to achieve access control, that the encryption algorithms, random number generator, or system organization be kept secret; in fact, a basic requirement of modern cryptographic technology is that it must be effective although a would-be penetrator is assumed to have full access to all of that information and the facilities and competence to apply it. Only the key can be assumed to be, and must be, physically secure. The sliding-block approach outlined makes use of pre-programmed software elements for providing all specialized algorithms, including the proposed federal data encryption standard (des), together with necessary nonnumeric generalized support routines for use with application programs written in conventional procedural higher languages (fortran, cobol, etc.). Both strong algorithm and long key methods can be used as required by security-level-vs-cost trade-off considerations. This method is useful in conjunction with specialized hardware; for testing of programs and hardware; in some cases instead of hardware; and can support multiple-level security applications. The entire scheme, including the tausworthe-lewis-payne bitwise linear recurrence modulo 2 quasirandom number generator, is based irrespective of hardware type on a standardized 4-bit data element.

Classification Codes and Description: 4.08 (Coding, Compacting)

Main Heading: Information Recognition and Description

12/5/8 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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5159570 INSPEC Abstract Number: C9602-6130S-026

Title: Controlling the use of cryptographic keys

Author(s): Holloway, C.J.

Affiliation: Security Solutions Group, IBM UK Labs. Ltd., London,

UK

Journal: Computers & Security vol.14, no.7 p.587-98

Publisher: Elsevier,

Publication Date: 1995 Country of Publication: UK

CODEN: CPSEDU ISSN: 0167-4048

SICI: 0167-4048(1995)14:7L:587:CCK;1-H

Material Identity Number: M680-96001

U.S. Copyright Clearance Center Code: 0167-4048/95/\$9.50

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Mechanisms to control the usage of keys have developed over time, and have had to change to meet new paradigms with the introduction of new cryptographic algorithms. The mechanisms proposed have, until recently, been to modify in some way the value of a **key** or its **key - encrypting - key** using **control information**. However, pure public **key** schemes are not amenable to this class of approach as any modification to **key** value upsets the mathematics which forms the basis of public key algorithms. The situation is complicated further by the use of hybrid schemes in which keys of one algorithm type are used to protect those of another, as is the case for example when using public key techniques for the distribution of symmetric keys. This paper traces the history and development of key usage controls, and looks into the potential for their extension. To do so, it presents a set of requirements that should be met for a control mechanism to be fully effective, both now and into the future, and assesses the mechanisms against these requirements. In the light of this background the paper postulates the need for a schema that could assimilate various methods of control without risk of conflict. The paper limits itself to a consideration of commercial cryptographic systems only. (5 Refs)

Subfile: C

Descriptors: authorisation; public key cryptography

Identifiers: cryptographic keys; cryptographic algorithms;
key-encrypting-key; control information; public key schemes; symmetric keys
; key usage controls; control mechanism; schema

Class Codes: C6130S (Data security); C0310D (Computer installation
management)

Copyright 1996, IEE

12/5/9 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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04166628 INSPEC Abstract Number: B9207-6430C-011

Title: Emission standard (Hi-Vision broadcasting)

Author(s): Ninomiya, Y.

Author Affiliation: NHK Sci. & Tech. Res. Lab., Tokyo, Japan

Journal: Journal of the Institute of Television Engineers of Japan
vol.45, no.11 p.1355-9

Publication Date: Nov. 1991 Country of Publication: Japan

CODEN: JITJA7 ISSN: 0386-6831

Language: Japanese Document Type: Journal Paper (JP)

Treatment: General, Review (G)

Abstract: Hi-Vision broadcast standards are considered for the **satellite transmission** system, data channel system and toll system. The standards for the NTSC system were recommended independently, while one complete recommendation on standards including studio standards was made for Hi-Vision. The data channel system specifies the data structure for the speech/data signal section of the MUSE signal. The toll system uses the data channel as the method of transmitting **key** information or **control information** in accordance with the specifications for Hi-Vision **scramble** broadcasting. Both systems are specified carefully so as to be common with existing NTSC satellite broadcasting except for the difference of signal forms between the MUSE and the NTSC system. (9 Refs)

Subfile: B

Descriptors: direct broadcasting by satellite; high definition
television; **television** broadcasting; **television** standards; **video**
signals

Identifiers: Hi-Vision broadcast standards; **satellite transmission**

system; data channel system; toll system; NTSC system; data structure; key information; control information; specifications; Hi-Vision scramble broadcasting; MUSE

Class Codes: B6430C (High definition television); B6420 (Radio and television broadcasting)

12/5/10 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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01421800 INSPEC Abstract Number: B79046295

Title: VHF/FM tuner: No tuning problems with the synthesizer tuner

Author(s): Winter, M.

Author Affiliation: Onkyo Deutschland GmbH, Gemering, West Germany

Journal: Funk-Technik vol.34, no.6 p.T273-5

Publication Date: June 1979 Country of Publication: West Germany

CODEN: FUTEAW ISSN: 0016-2825

Language: German Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The digital synthesizer tuner T-909 by Onkyo described is based on a quartz oscillator operating at 6.4 MHz and the conventional system of fixed and programmable frequency dividers and a phase- and frequency comparator loop. The tuner is divided into the following sub-units: memory/scan selector with 7 touch buttons and a manual **key**, with an error detector; a memory (DIP) switch; channel selector **control**; **code** converter, **decoder** driver and final detector, (200 kHz raster for USA, 50 kHz steps for Europe); and the 10-stage LED indicator. (0 Refs)

Subfile: B

Descriptors: digital instrumentation; tuning

Identifiers: VHF; synthesizer tuner; quartz oscillator; frequency dividers; frequency comparator loop; channel selector control; decoder driver; LED indicator; digital FM tuner; phase comparator; code convertor

Class Codes: B1265 (Digital electronics)

12/5/11 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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01632826 Genuine Article#: HN196 Number of References: 6

Title: PERFORMANCE OF AN ERROR CORRECTION SCHEME FOR PAL- TV TELETEXT

Author(s): MORIYAMA S; KURODA T; YAMADA O

Corporate Source: NHK JAPAN BROADCASTING CORP, SCI & TECH RES LABS, 1-10-11 KINUTA, SETAGAYA KU/TOKYO 157//JAPAN/

Journal: IEEE TRANSACTIONS ON BROADCASTING, 1992, V38, N1 (MAR), P43-47

Language: ENGLISH Document Type: ARTICLE

Geographic Location: JAPAN

Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology & Applied Sciences

Journal Subject Category: TELECOMMUNICATIONS; ENGINEERING, ELECTRICAL & ELECTRONIC

Abstract: The shortened (272,190) difference set cyclic code has been adopted for the Japanese teletext system using NTSC vertical blanking periods. This system is known as BEST (Burst and random Error correction System for Teletext), for NTSC- **TV** systems. Recently, a powerful error correction system adopting the (272,190) code for PAL- **TV** teletext signals has been developed. This paper outlines the system. To compare the difference of the error correction characteristics between this system and WST (World System Teletext), transmission experiments were carried out multiplexing both data packets with different lines during the vertical blanking period of the same **TV** signals. As a result of the transmission experiments, the validity of applying BEST to the PAL- **TV** signals was proved. Generally, the environment for receiving **TV** broadcasts is severe to teletext. When there is ghost interference, a powerful error correcting code such as the (272,190) code is considered indispensable for teletext data transmission. In particular, important information such

as telesoftware data, **key** data for **cipher** systems, and **control codes** should be reliably protected by powerful error correcting codes.

Cited References:

CCIR RECOMMENDATION
IERE TELESOFTWARE PU, 1984, V60
BALCHIN C, 1989, P380, OCT BEIJ INT S RAD T
MORIYAMA S, 1990, IEICE RCS9014
MORTIMER BC, 1990, V36, IEEE T BROADCASTING
YAMADA O, 1987, V35, IEEE COM

12/5/12 (Item 1 from file: 99)
WILSON File 99:Wilson Appl. Sci & Tech Abs
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1272050 H.W. WILSON RECORD NUMBER: BAST95067843

Programmable PABX chip offers 12 lines

AUGMENTED TITLE: SC11390 from Amega Electronics

Mann, David;

Electronic Engineering v. 67 (Oct. '95) p. 109

DOCUMENT TYPE: Product Evaluation ISSN: 0013-4902 LANGUAGE: English

RECORD STATUS: New record

ABSTRACT: The SiTel Sierra SC11390 from Amega Electronics is an analog private automatic branch exchange integrated circuit to connect 2 external lines and 12 extensions. A **key** feature of the chip is an analog switch matrix that interconnects the voice and **control signals**. Using the analog matrix, the chip can receive, transmit, connect, detect, and **decode** speech and **control signals** from any one of the lines or the devices used in the application.

DESCRIPTORS: Telephone network interfaces; Telephone--Private branch exchanges; Product evaluation;

12/5/13 (Item 1 from file: 583)
WILSON File 583:Gale Group Globalbase(TM)
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03484034

IT SECURITY LAUNCHES SECURE LAN

UK - IT SECURITY LAUNCHES SECURE LAN

Online Finance (OLF) 0 May 1990 p8

IT Security International has launched the Secure LAN high security LAN (local area network). The system features access control, file management, PC resource **control** and **data encryption**, with optional fibre optic cabling. The LAN software comes with **encryption key** management facilities driven by menu. The product runs on IBM AT, XT, PC and compatibles with Dos version 3.0 or after, with a hard **disk** drive and 128k or more available Ram. Several transmission media are offered, such as fibre optic and coaxial cable, Ethernet and twisted-pair.

File 275:Gale Group Computer DB(TM) 1983-2004/Mar 09
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 File 621:Gale Group New Prod. Annou. (R) 1985-2004/Mar 09
 (c) 2004 The Gale Group
 File 636:Gale Group Newsletter DB(TM) 1987-2004/Mar 09
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 File 16:Gale Group PROMT(R) 1990-2004/Mar 09
 (c) 2004 The Gale Group
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 148:Gale Group Trade & Industry DB 1976-2004/Mar 05
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 (c) 2004 McGraw-Hill Co. Inc
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 (c) 2004 IDG Communications
 File 696:DIALOG Telecom. Newsletters 1995-2004/Mar 08
 (c) 2004 The Dialog Corp.
 File 369:New Scientist 1994-2004/Feb W5
 (c) 2004 Reed Business Information Ltd.

Set	Items	Description
S1	95234	CONTROL(1W)(SIGNAL? ? OR DATA OR INFORMATION OR HEADER? ? - OR BIT? ? OR BYTE? ? OR PACKET? ? OR FRAME? ? OR DATAFRAME? ? OR DATAGRAM? ? OR MESSAGE? ? OR BEAM? ? OR TEXT OR CHARACTER? ? OR STRING? ? OR NUMBER? ? OR CODE? ?)
S2	3345516	KEY? ?
S3	106	S1(10N)S2(10N)(DECRYPT? OR DECIPHER? OR DECYPHER? OR UNENC- IPHER? OR UNENCRYPT? OR UNCIPHER? OR UNLOCK? OR ENCRYPT? OR E- NCIPHER? OR ENCPYPER?)
S4	32	S1(10N)S2(10N)(CIPHER? OR CYPHER? OR SCRAMBL? OR ENCOD? OR DECOD??? OR UNSCRAMBL? OR DESCRAMBL??? OR UNENCOD? OR UNCOD?)
S5	127	S3:S4
S6	78	RD (unique items)
S7	28	S6 NOT PY=1996:2004

7/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01825439 SUPPLIER NUMBER: 17137185 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Remote Access Management System. (a set of three intelligent software security modules from Cylink) (Network Software) (Brief Article) (Product Announcement)
PC User, n260, p23(1)
May 31, 1995
DOCUMENT TYPE: Product Announcement ISSN: 0263-5720 LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 256 LINE COUNT: 00025

... which they are not authorised.
ESA contains three layers. The first layer is made up of two management modules, the second ensures source verification, access **control** and **information** integrity. The third is a private capabilities layer which houses the **encryption** algorithm module and the **key** management module.

7/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01801209 SUPPLIER NUMBER: 17166696
Smells like team spirit to E-mail vendors. (partnerships on the rise in E-mail industry)
Mohan, Suruchi
Computerworld, v29, n19, p15(1)
May 8, 1995
ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: as a launching pad for numerous alliances, including a partnership between Microsoft and Sprint to create a broadcast distribution fax service, as well as a **Control Data** Systems and Nortel Secure Networks agreement to integrate Nortel's public **key encryption** product with **Control Data** 's messaging integration product.

7/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01775120 SUPPLIER NUMBER: 16846958 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Addressing high-risk remote access applications with challenge/response user authentication.
Tuomy, John
Telecommunications, v29, n3, p58(1)
March, 1995
ISSN: 0278-4831 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 977 LINE COUNT: 00086

...ABSTRACT: or by stealing written passwords. Challenge/response security systems provide a two-tiered password security structure. This structure uses hardware and software products including access **control** systems, **data encryption** algorithms and electronic **keys**.

7/3,K/4 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01713268 SUPPLIER NUMBER: 16206839 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cylink provides CIDECS-MLS Network Security System. (Cylink Corp) (Brief Article) (Product Announcement)
HP Professional, v8, n10, p61(1)

July, 1994

DOCUMENT TYPE: Product Announcement ISSN: 0896-145X LANGUAGE:
ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 141 LINE COUNT: 00011

... most expensive aspect of data security and the most vulnerable to compromise.

Each encryption plug-in card can provide access control for 255 remote sites, **encrypting** each link with a unique session **key**, thus providing totally secure access **control** and **data** confidentiality.

Price for the plug-in cards starts at \$525.

7/3,K/5 (Item 5 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)
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01602214 SUPPLIER NUMBER: 13924423 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cryptography: breaking the code. (an encryption program that uses a random number generator) (Column) (What's the Code?) (Tutorial)
Stafford, David
Computer Shopper, v13, n7, p558(2)
July, 1993

DOCUMENT TYPE: Tutorial ISSN: 0886-0556 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1816 LINE COUNT: 00135

... generous and assume that the decoded message is a plain-text ASCII file. This makes it easy for the enemy to determine when the trial **decoding** is successful. If any characters are not valid ASCII text or one of the few **control characters** (carriage return, line feed, etc.), then the **decoding** program can discard the **decryption** and try another **key**. So, if the program could try 1,000 keys per second, decoding would take an average of 2,147,483 seconds (4,294,967 divided...)

7/3,K/6 (Item 6 from file: 275)

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01517717 SUPPLIER NUMBER: 12182948 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Go Forth and multiply. (distributed architectures)
McLachlan, Gordon
LAN Computing, v3, n5, p19(3)
May, 1992
ISSN: 1055-1808 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2421 LINE COUNT: 00184

... the mismatch almost total, the Sun and DCE RPC offerings also differ in how they handle security. Sun uses its own blend of UNIX access **control**, RPC **message encryption** and **key** passing to authorize and authenticate RPC clients. DCE uses Kerberos authentication, which requires a dedicated security server and hopped-up variants of UNIX access control

7/3,K/7 (Item 7 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)
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01442975 SUPPLIER NUMBER: 11028689 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Securing VSATs for video/data transmission. (very small aperture terminals, computer security)
Shimabukuro, Tom M.; Nakamine, Wendell T.
Telecommunications, v25, n7, p64(5)
July, 1991
ISSN: 0278-4831 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 3520 LINE COUNT: 00296

... quality comparable to that achieved with compact disks. This digital audio signal is encrypted with a DES algorithm or equivalent, typically with a 56-bit **key** .

The audio and auxiliary data channels, **encryption key** information, and **control signals** are all **encrypted** and inserted into the horizontal blanking interval. The process is then reversed in the **decoder** .

In all of the vendors' approaches, the digital audio channel is digitally encoded with an electronic key. In the case of business or commercial

7/3,K/8 (Item 8 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01249591 SUPPLIER NUMBER: 06419960 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Securing satellite signals. (transmitted information and security costs)

Shimabukuro, Tom M.

Telecommunication Products & Technology, v6, n6, p20(6)

June, 1988

ISSN: 0746-6072 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3196 LINE COUNT: 00269

... quality comparable to that achieved with compact disks. This digital audio signal is encrypted with a DES algorithm or equivalent, typically using a 56-bit **key** .

The audio and auxiliary data channels, **encryption key** information and **control signals** are all **encrypted** and inserted into the horizontal blanking interval. The process is then reversed in the **decoder**

In all of the vendors' approaches, the digital audio channel is digitally encoded with an electronic key. In the case of business or commercial communications...

7/3,K/9 (Item 9 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01058420 SUPPLIER NUMBER: 00661627

LAN: DataCore- A Network Database for PCs.

Hartstein, M.

Systems & Software, v3, n1, p176-178

Jan., 1984

ISSN: 0039-8047 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: of security available are field access, record access and intrinsic authority limitation. Audit trails, only available to the data base manager, are kept. There are **encrypted** user passwords and a tamper detection indicator. **Keys** are automatically updated and maintained in dynamic Bt tree structures. Twelve intrinsics **control** all **data** base activities. A chart lists DataCore limitations and an inset explains the most frequently used intrinsics.

7/3,K/10 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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0168937 Supplier Number: 44953029 (USE FORMAT 7 FOR FULLTEXT)

OPTICAL DATA SYSTEMS QUADRUPLES FDDI BANDWIDTH AND CAPACITY ALONG WITH INCREASING FDDI CAPABILITIES

PR Newswire, pN/A

August 29, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

... and information privacy.
-- Detects when an attached station attempts to mimic another station which can prevent a user from pretending to be another station.
-- Provides **encryption** and **decryption** capabilities. Detects any LLC (Logical Link Control) **frame** not sourced by or destined for a connected **encrypted** station.
-- Provides **encryption** and **decryption** **key** generation and switching functions to enhance the network's information privacy.
-- Hardware based Graceful Insertion.
-- Overcomes the liability of software based graceful insertion by using....

7/3,K/11 (Item 2 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2004 The Gale Group. All rts. reserv.

01187757 Supplier Number: 42837342 (USE FORMAT 7 FOR FULLTEXT)
INDUSTRY'S FIRST FULLY INTEGRATED READ-CHANNEL IC FOR DISK DRIVE INCLUDES ALL CHANNEL FUNCTIONS; MEETS NEEDS OF NEXT-GENERATION DRIVES

News Release, pl

March 17, 1992

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 353

... FULLY INTEGRATED READ-CHANNEL IC FOR DISK DRIVE
INCLUDES ALL CHANNEL FUNCTIONS; MEETS NEEDS OF NEXT-GENERATION DRIVES

-32 Mbit/s device includes: Automatic Gain **Control**, Filters, **Data** Qualifier, Data Synchronizer, **Encoder / Decoder**, Write Clock Synthesizer and Servo Demodulator all **key** parameters are user-programmable. An attached tutorial describes the disk-drive read-electronics signal path

NORWOOD, Mass -- Incorporating all elements of a hard-disk-drive...

7/3,K/12 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

02476527 Supplier Number: 44965055 (USE FORMAT 7 FOR FULLTEXT)

ODS Quadruples FDDI Bandwidth in Hub

Broadband Networks and Applications, v3, n2, pN/A

Sept 1, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 610

... Security and privacy capabilities
-- Detection of an attached station attempting to mimic another station which can prevent a user from pretending to be another station
-- **Encryption** and **decryption** capabilities. Detects any LLC (Logical Link Control) **frame** not sourced by or destined for a connected **encrypted** station.
-- **Encryption** and **decryption** **key** generation and switching functions to enhance the network's information privacy.
-- Hardware based Graceful Insertion.
-- Overcoming of the liability of software-based graceful insertion by
...

7/3,K/13 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

02107461 Supplier Number: 43904805 (USE FORMAT 7 FOR FULLTEXT)

LEITCH INC.

Security Technology News, v1, n4, pN/A

June 15, 1993

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 109

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Leitch Inc. in Chesapeake, Va., offers ViewGuard a high security television **scrambling** system that provides high security transmission of television programs over both terrestrial and satellite networks. Leitch **encrypts** the **control information** using electronic **keys** several times with the digital **encryption** standard (DES) algorithm. Leitch's ViewGuard has a proprietary algorithm for export systems. Leitch designed ViewGuard scrambling system to include an arithmetic logic unit for...

7/3,K/14 (Item 3 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

01033498 Supplier Number: 40461179 (USE FORMAT 7 FOR FULLTEXT)

SECURITY STANDARDS FOR DATA NETWORKS

Computer Fraud & Security Bulletin, v10, n10, pN/A

August, 1988

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 2505

... available security mechanisms requiring prior agreement, invocation of specific mechanisms and interaction with other security system and mechanism management functions. Security mechanism management can include **key** management, **encipherment** management, digital signature management, access **control** management, **data** integrity management, authentication management, traffic padding management, routing control management and notarization management.

The lists in the previous paragraph should leave the reader in no...

7/3,K/15 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2004 The Gale Group. All rts. reserv.

03925162 Supplier Number: 45671476 (USE FORMAT 7 FOR FULLTEXT)

ATM FORUM SHOULD MOVE QUICKLY ON SECURITY

CommunicationsWeek, p62

July 17, 1995

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 374

... problem, but they involve limiting the very capabilities ATM was implemented for - fast, efficient, simultaneous transmission of information. Without robust security features like authentication, access **control**, confidentiality, **data** integrity and distribution of shared 'public **keys**' for data **encryption** at the ATM transport level, ATM couldn't be embraced as a viable LAN or WAN protocol.

Right now, ATM is being used by an...

7/3,K/16 (Item 2 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2004 The Gale Group. All rts. reserv.

01393461 Supplier Number: 41659027 (USE FORMAT 7 FOR FULLTEXT)
Satellite decoder reprograms on the fly, stits 'dish' market
Electronic World News, p19f
Nov 5, 1990
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 299

... on the domestic satellite decoder business, but the security of its design can be compromised by several means. The simplest requires a 128k EPROM containing **decoding key** gateways that are substituted for GI's ROM-based copyrighted **control code**.

The system from DecTec "is as customizable as a blank piece of canvas to an artist," said president John Grayson. But GI contends that the...

7/3,K/17 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

01368951 Supplier Number: 41623386 (USE FORMAT 7 FOR FULLTEXT)
Piracy issue haunts GI
Electronic Engineering Times, p82
Oct 22, 1990
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 361

... because the security of the VC II design has been compromised by a number of means, the simplest of which requires a 128k EPROM--containing **decoding key** gateways--to be substituted for GI's copyrighted **control code** that's normally housed in ROM. Once a new EPROM is present, pirate users employ a keypad to enter a series of 32 hexadecimal numbers...

7/3,K/18 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

09919297 SUPPLIER NUMBER: 20014724 (USE FORMAT 7 OR 9 FOR FULL TEXT)
War stories from the security front. (door and hardware for building security)
Berger, Mark
Doors and Hardware, v59, n9, p52(3)
Sep, 1995
ISSN: 0361-5294 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 2098 LINE COUNT: 00161

... Solution: Modifying the existing mantrap lever handle unit by adding a separate cylinder module to the too of the unit. In normal operation, turning the **key** momentarily **unlocks** the lever. If the mantrap **control unit signals** that the other door is secured, then lowering the lever handle retracts the latch and releases the electromagnet.

The emergency module, to be painted red...

7/3,K/19 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

06220444 SUPPLIER NUMBER: 12786467 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Buyer's guide to EDI software for purchasing. (electronic data interchange)
(Special Section: Office Products & Business Systems) (Buyers Guide)
Purchasing, v113, n1, p95(4)
July 16, 1992
DOCUMENT TYPE: Buyers Guide ISSN: 0033-4448 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT

WORD COUNT: 4594 LINE COUNT: 00389

... A security failure always results in the rejection of the transaction being processed. The components which are tailorable to any user's situation include an **encryption** algorithm and **KEY**, an authentication algorithm and **KEY**, and the Security Control Data Transport, a special Security Control Transaction Set that conforms to the ANSI X.12 standard. Circle 399

EDI, spread the word! Not an EDI software...

7/3,K/20 (Item 3 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

05930238 SUPPLIER NUMBER: 12652489 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cable ops terminate pirate boxes. (cable television operators; pirate set-top decoders) (Industry Overview)

Kim, Gary

Multichannel News, v13, n24, p43(1)

June 15, 1992

DOCUMENT TYPE: Industry Overview ISSN: 0276-8593 LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 754 LINE COUNT: 00060

... scheme, so pirates then concentrated on attacking the addressable data stream itself, in an attempt to fool the box into thinking it is authorized to **descramble** all premium and pay-per-view programming, Moloney noted.

Encryption of the addressable **control data** is one new defense. So is a periodic shuffling of the **keys** " set-tops look for before **descrambling** signals. Jerrold also puts extremely sensitive decoding instructions ("code") on a single chip. That makes reading the data more difficult, Moloney said.

The latest set...

7/3,K/21 (Item 4 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

04605948 SUPPLIER NUMBER: 09156125 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Checked your infosec lately? (information security)

Weyhausen, Catherine W.

Security Management, v34, n6, p75(2)

June, 1990

ISSN: 0145-9406 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 1499 LINE COUNT: 00131

... security, however, such as a locked desk or file cabinet. If that is the case, be sure to have an administrative procedure in place for **key control**. **Data** in the most sensitive classification, if stored in computer memory, may require **encryption**.

Destruction. The **key** to destroying sensitive data is ensuring that information is no longer readable by people or machines. You should establish procedures for shredding paper and diskettes...

7/3,K/22 (Item 5 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

02326380 SUPPLIER NUMBER: 03726387 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Controlling hydraulics at the speed of light. (fiber-optic controls, electric isolation, electromagnetic interference protection)

Beercheck, Richard C.

Machine Design, v57, p83(4)

April 11, 1985

ISSN: 0024-9114 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1677 LINE COUNT: 00137

... a frame. To be recognized as complete, a frame must be the exact length of the fixed format and be followed immediately by the synchronization **key** of the next frame. When two complete sequential frames are recognized, frames are **decoded** to reconstruct the **control information**.

Outputs are updated at the frame transmission rate to provide continuous control. The recognition of an error shuts down the system immediately to ensure operator...

7/3,K/23 (Item 1 from file: 624)
DIALOG(R)File 624:McGraw-Hill Publications
(c) 2004 McGraw-Hill Co. Inc. All rts. reserv.

0680405

KEEPING THE BARBARIANS O*U&T!: Network Security, Firewalls, and External Security Products

Open Computing July, 1995; Pg 36

Journal Code: UNIX ISSN: 0739-5922

Section Heading: THE GROWING PROFESSIONAL MENACE

Word Count: 677 *Full text available in Formats 5, 7 and 9*

BYLINE:

RIKKI KIRZNER

TEXT:

...software for mobile computers. Low-Speed Certificate Encryptor is a \$295 hardware device for remote users dialing into a public or private network that uses **encryption** and public **key** certificate technology. CIDECS-MLS Network Security System provides secure access **control** and **data** confidentiality for host-and

server-based information systems. The plug-in card price begins at \$595.
408-735-5800

IBM CORP. developed its new NetSP...

7/3,K/24 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01141130 97-90524

Controlling the use of cryptographic keys

Holloway, Christopher J

Computers & Security v14n7 PP: 587-598 1995

ISSN: 0167-4048 JRNL CODE: CSC

...ABSTRACT: new paradigms with the introduction of new cryptographic algorithms. The mechanisms proposed have, until recently, been to modify in some way the value of a **key** or its **key - encrypting - key** using **control information**. This approach has proven very effective when using **keys** of arbitrary value, as for example in the case of DES keys. However, pure public key schemes are not amenable to this class of approach...

7/3,K/25 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00759575 94-08967

A public key extension to the Common Cryptographic Architecture

Le, An V; Matyas, Stephen M; Johnson, Donald B; Wilkins, John D

IBM Systems Journal v32n3 PP: 461-485 1993

ISSN: 0018-8670 JRNL CODE: ISY

WORD COUNT: 16326

...TEXT: vice versa. The role of the Extension field is described in Reference 3.

The UCB is 64 bytes long and contains user-or installation-managed **control information** associated with the **key**. The public **key** extension provides for a user or an installation to **encode** extra **control information** --deemed useful--in the UCB. However, the cryptographic facility does not check the values in the UCB; it is up to the application program to...

7/3,K/26 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2004 CMP Media, LLC. All rts. reserv.

01059179 CMP ACCESSION NUMBER: CWK19950717S0075
ATM Forum Should Move Quickly On Security (Editorial)
COMMUNICATIONSWEEK, 1995, n 566, PG62
PUBLICATION DATE: 950717
JOURNAL CODE: CWK LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Opinion
WORD COUNT: 371

... problem, but they involve limiting the very capabilities ATM was implemented for--fast, efficient, simultaneous transmission of information. Without robust security features like authentication, access **control**, confidentiality, **data** integrity and distribution of shared "public **keys**" for **data encryption** at the ATM transport level, ATM couldn't be embraced as a viable LAN or WAN protocol.

Right now, ATM is being used by an...

7/3,K/27 (Item 1 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2004 IDG Communications. All rts. reserv.

044434
Briefs
Journal: Network World Page Number: 49
Publication Date: May 22, 1995
Word Count: 227 Line Count: 23

Text:

... Brown: (800) 331-1664. The Secure Networks group of Northern Telecom, Inc. is working with Control Data Systems, Inc. to integrate Entrust, NorTel's public-**key** cryptography software, into **Control Data's** X.400 and X.500 messaging software, MailHub, to add digital signature and **encryption** functionality by midyear. **Control Data Systems:** (612) 482-3907.

7/3,K/28 (Item 2 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2004 IDG Communications. All rts. reserv.

004136
A network security primer
OSI guidelines can help you plan and build more secure systems
Byline: William Stallings; Stallings is President of Comp-Comm Consulting in Prides Crossing, Mass., and author of 14 books on data communications.
Journal: Computerworld Page Number: 63
Publication Date: January 29, 1990
Word Count: 3820 Line Count: 276

Text:

...key.

A main disadvantage of public-key encryption is that its algorithms are very complex. So, for comparable size and cost of hardware, the public-key scheme will provide much lower throughput.

One possible application of public-key encryption is to use it for the permanent key portion, with conventional encryption keys used for session keys. Because there are few control messages relative to the amount of user data traffic, the reduced throughput should not be a handicap.

1773,K/3 (Item 3 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01453691

Receiving controlled-access broadcast signals

Empfang von Rundfunksignalen mit bedingtem Zugang

Reception de signaux de telediffusion en acces conditionnel

PATENT ASSIGNEE:

Sony Corporation, (214028), 7-35, Kitashinagawa 6-chome, Shinagawa-ku,
Tokyo 141-0001, (JP), (Applicant designated States: all)

INVENTOR:

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LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 1244306 A2 020925 (Basic)

APPLICATION (CC, No, Date): EP 2002076569 950706;

PRIORITY (CC, No, Date): JP 94180637 940708

DESIGNATED STATES: DE; FR; GB

RELATED PARENT NUMBER(S) - PN (AN):

~ EP 975165 (EP 99121045)

EP 691787 (EP 95304743)

INTERNATIONAL PATENT CLASS: H04N-007/16

ABSTRACT WORD COUNT: 58

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200239	1948
SPEC A	(English)	200239	8500
Total word count - document A			10448
Total word count - document B			0
Total word count - documents A + B			10448

...SPECIFICATION descrambler 21A, recording/reproducing section 23A, and access controller 28A. When enabled by the access controller, encipherer 22 encrypts, according to an encryption key, descrambled video signals supplied by descrambler 21A to produce encrypted video signals. The encrypted video signals are supplied to recording/reproducing section 23A for recording. However, the encrypted video signals cannot be displayed by ordinary means. ~~It is contemplated that the encryption key is prestored in encipherer 22, or is supplied by access controller 28A, or is included in the video signals or in the access-control signals supplied by broadcasting station 101.~~ When disabled by access controller 28A, encipherer 22 passes descrambled video signals from descrambler 21A directly to section 23A without encryption.

Recording/reproducing section 23A, through a record/playback head 24, or the like, records on storage medium 40 video signals supplied by encipherer 22. Section 23A, through head 24, also reads previously recorded video signals from storage medium 40 and supplies the reproduced video signals to decipherer 25. Preferably, section 23A is a digital video tape recording/reproducing device (VTR) and storage medium 40 is a video tape. However, other types of storage media are contemplated, such as optical, magnetic or magneto-optic disc, solid-state memory, or the like.

Decipherer 25 is coupled to decoder 26 and, when enabled by access controller 28A, is adapted to decrypt, according to an encryption key, encrypted signals supplied by recording/reproducing section 23A. It is contemplated that the encryption key is prestored in decipherer 25, or is supplied thereto by access controller 28A, or is

included in the **video** signals or the access- control signals supplied by broadcasting station 101, or is stored in storage medium 40, or is stored in access condition memory 29. When disabled, decipherer 25 passes **video** signals from recording/reproducing section 23A directly to decoder 26 without decryption.

As is well known in the art, **video** signals are commonly compressed or otherwise coded to facilitate their transmission through a transmission medium. Decoder 26 decodes such coded digital video signals as reproduced. Whether applicable conditions have been fulfilled, the access controller enables or disables the operation of encipherer 22 and decipherer 25. Access controller 28A stores access- control signals in and retrieves access-control signals from access condition memory 29. In an alternate embodiment, it is contemplated that the access controller 28A stores both access-control signals and the **encryption keys** of encipherer 22 and decipherer 25 in access condition memory 29.

Access- control signals indicate the conditions, if any, to be placed on the reproduction of the **video** component of the selected digital **video** signals. These conditions describe the circumstances under which a user may or may not reproduce the selected **video** signals. As a function of the access- control signals, the selected **video** signals recovered by descrambler 21A are processed prior to recording and processed again following reproduction. Depending on the particular conditions and circumstances, a user can...signals supplied by encipherer 22 and access-control signals supplied by access controller 28B; and also reads previously recorded video signals and previously recorded access- control signals from the storage medium. The reproduced video signals are supplied to decipherer 25 and the reproduced access-control signals are supplied from the recording recording/reproducing device (VTR) and storage medium 40 is a video tape; although the storage medium may be a magnetic disc, an optical disc, a magneto-optic disc, a solid-state device, or other recordable medium. It is also preferred that the access- control signals be stored in one or more sub-code regions of the storage medium.

When enabled by access controller 28B, decipherer 25 decrypts, according to an **encryption key**, encrypted signals reproduced by recording/reproducing section 23B. It is contemplated that the **encryption key** is prestored in the decipherer or is supplied thereto by access controller 28B, or is included in the **video** signals or the access- control signals supplied by broadcasting station 101, or is stored in and read from storage medium 40. When disabled, decipherer 25 passes **video** signals from recording/reproducing section 23B directly to decoder 26 without decrypting such signals.

17/3,K/22 (Item 22 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00752180

Method and apparatus for free previews of communication network services
Verfahren und Vorrichtung zur freien Vorschau von Diensten eines
Kommunikationsnetzwerks

Procede et dispositif pour des previsualisations libre des services dans un
reseau de communication

PATENT ASSIGNEE:

GENERAL INSTRUMENT CORPORATION, (2532982), 101 Tournament Drive, Horsham,
PA 19044, (US), (Proprietor designated states: all)

INVENTOR:

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(US)

LEGAL REPRESENTATIVE:

Beck, Jorgen, Dr. Dipl.-Phys. et al (57621), Hoeger, Stellrecht & Partner
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PATENT (CC, No, Kind, Date): EP 708561 A2 960424 (Basic)
EP 708561 A3 970319
EP 708561 B1 020828

APPLICATION (CC, No, Date): EP 95116142 951013;

PRIORITY (CC, No, Date): US 324591 941018

DESIGNATED STATES: BE; CH; DE; DK; ES; FR; GB; IE; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: H04N-007/167

ABSTRACT WORD COUNT: 182

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	1085
CLAIMS B	(English)	200235	1149
CLAIMS B	(German)	200235	1171
CLAIMS B	(French)	200235	1341
SPEC A	(English)	EPAB96	5812
SPEC B	(English)	200235	5906
Total word count - document A			6898
Total word count - document B			9567
Total word count - documents A + B			16465

...SPECIFICATION disclosed in Gilhousen, et al. U.S. patent 4,613,901
entitled "Signal Encryption and Distribution System for Controlling
Scrambling and Selective Remote Descrambling of **Television** Signals,"
or Bennett et al. U.S. patent 4,864,615 entitled "Reproduction of
Secure **Keys** By Using Distributed **Key** Generation Data," both
incorporated herein by reference. The **decryption** processor requires
working **keys** (WK) in order to **decrypt** the signals input thereto via
terminal 10. The working **keys** are generated by a secure processor 20
in response to **control signals** received via input/output (I/O)
terminal 30. Firmware for the secure processor is stored in read only
memory (ROM) 24. The secure processor is...

...SPECIFICATION disclosed in Gilhousen, et al. U.S. patent 4,613,901
entitled "Signal Encryption and Distribution System for Controlling
Scrambling and Selective Remote Descrambling of **Television** Signals," or
Bennett et al. U.S. patent 4,864,615 entitled "Reproduction of Secure
Keys By Using Distributed **Key** Generation Data," both incorporated
herein by reference. The **decryption** processor requires working **keys**
(WK) in order to **decrypt** the signals input thereto via terminal 10. The
working **keys** are generated by a secure processor 20 in response to
control signals received via input/output (I/O) terminal 30. Firmware
for the secure processor is stored in read only memory (ROM) 24. The
secure processor is...

17/3,K/57 (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00271731 **Image available**

GENERATION OF ENLARGED PARTICIPATORY BROADCAST AUDIENCE
OBTENTION D'UNE AUDIENCE PARTICIPATIVE ELARGIE EN MATIERE DE RADIODIFFUSION
Patent Applicant/Assignee:

VON KOHORN Henry,
Inventor(s):

VON KOHORN Henry,
Patent and Priority Information (Country, Number, Date):

Patent: WO 9419906 A1 19940901
Application: WO 94US1535 19940214 (PCT/WO US9401535)
Priority Application: US 9325397 19930225
Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 99584

Fulltext Availability:
Detailed Description

Detailed Description

... 636,
Also, by use of the control line 640 and the switch board 622, the host can send a synchronization tone signal to synchronize the **tape** recorders 520 to simultaneously activate the response units 210 of the various callers. For the foregoing purposes, the central station 202 (Figo 22) comprises an additional keyboard 642 and a tone **encoder** '644 connected thereto, as well as a microphone 646. The **control signals** are generated by pressing a specific **key** or **keys** of the keyboard 642 to activate the desired function, the **keys** generating command signals which are converted by the **encoder** into tone signals which are recognized by the switchboard 622 and the decoders 626 to provide a desired switching function and a desired function of...:

17/3,K/58 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00260243

LOCATION-SENSITIVE REMOTE DATABASE ACCESS CONTROL
COMMANDE D'ACCES A UNE BASE DE DONNEES A DISTANCE SENSIBLE A L'EMPLACEMENT
Patent Applicant/Assignee:

GTE LABORATORIES INCORPORATED,
Inventor(s):

TEARE Melvin John,
WALKER Stephen Sidney,
Patent and Priority Information (Country, Number, Date):

Patent: WO 9408408 A1 19940414
Application: WO 93US9155 19930927 (PCT/WO US9309155)
Priority Application: US 92954624 19920930
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 1766

Fulltext Availability:
Detailed Description

Detailed Description

... is a diagram of a communication scenario depicting an implementation of the present invention.

The present invention relates to a system which
15 communicates authorization **control signals** from a central
facility to a remote mobile node in response to a positive
match between predetermined time-position signature data
representing location histories and actual time-position
data of the remote mobile node. The authorization
20 permits, for example, the viewing of otherwise **encrypted**
programming material. The authorization **control signal** is
a code **decryption key** which is used at the remote node for
decrypting the program. The system of the present
invention is shown in the block diagram of Figure 1.

A remote node 11 is a mobile unit where encrypted
signals reside. In a preferred embodiment, the remote
node is an aircraft, and the signals are **video** program
material such as **movies** used as in-flight entertainment by
the airline industry. The programming information is not
30 limited to video material, as it should be obvious to...

17/3,K/59 (Item 18 from file: 349)
PROCUR File 349:PCT FULLTEXT
4 WIFO/Univentio. All rts. reserv.

4001 **Image available**

ACCESS SYSTEMS

SYSTEMES D'ACCES

Patent Applicant/Assignee:

MARS INCORPORATED,
ARMOUR James Joseph,
GLASSPOOL Andrew Jim Kelley,

Inventor(s):

ARMOUR James Joseph,
GLASSPOOL Andrew Jim Kelley,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8806826 A1 19880907
Application: WO 88GB151 19880302 (PCT/WO GB8800151)
Priority Application: GB 874850 19870302

Designated States: AT BE CH DE FR GB IT JP LU NL SE US

Publication Language: English

Fulltext Word Count: 4025

Fulltext Availability:

Detailed Description

Detailed Description

... code. The invention is particularly but not exclusively
concerned with conditional access television systems,
e.g. for satellite broadcasting systems.

Various proDOSals for conditional access **television**
systems are described in the Journal of the Institution
of Electronic and Radio Engineers, Vol. 55, No. 11/12,
pp-377 to 385, November/December 1985. Figure 4 on p'a*ge
382 illustrates one such system, in which a transmitter
transmits scrambled **television** picture and sound signals
and **encrypted control signals**. In the receiver, the
control signals are **decrypted** and used for descrambling
the picture and sound signals. **Decryption** is carried out
in a detachable sub-system (also referred to herein as a
key). The sub-system stores a distribution key (also
referred to herein as a security code) and a validation
code which are combined to form an...envisaged that at predeter.

mined times2 preferably separated by at least a day, and
more preferably several days, the security codes being
produced by all **keys** or sub-systems for **decrypting**
control signals used for **descrambling television**

signals, and the code used by the transmitter to **encrypt** such **control signals**, would change in synchronism.

The invention is preferably embodied in a pre payment system, If the system does not require the transmission of validation codes...the microprocessor in performing a decryption function.

Although the present invention has been described primarily in connection with a sub-system which generates an authorisation **key** for **decrypting control signals** transmitted with a television signal, other techniques are possible. The **control signals** may be generated locally, rather than being broadcast by the television signal transmitter, or the signals from the sub-system could be used directly for **descrambling television signals** rather than **decrypting control signals** which are then used for **descrambling**. The authorisation **keys** produced by the sub-system may be used for other purposes than **descrambling**. In addition to satellite broadcasting, the invention is useful also in terrestrial broadcasting and cable systems.

Of course the invention is also applicable to systems...

17/3,K/60 (Item 19 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00146081

REMOTE TRANSACTION SYSTEM
SYSTEME DE TRANSACTION A DISTANCE

Patent Applicant/Assignee:

WALKER Mark E,

Inventor(s):

WALKER Mark E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8802967 A1 19880421

Application: WO 87US2632 19871014 (PCT/WO US8702632)

Priority Application: US 86280 19861017

Designated States: AT AT AU BB BE BG BJ BR CF CG CH CH CM DE DE DK FI FR GA
GB GB HU IT JP KP KR LK LU LU MC MG ML MR MW NL NL NO RO SD SE SE SN SU
TD TG

Publication Language: English

Fulltext Word Count: 6302

Fulltext Availability:

Detailed Description

Detailed Description

... are automobile keys

where the booth 11 is used in conjunction with car rental services. A second decoder or dispenser decoder 24t similar to the **video** sequencing decoder 20F has its input connected to the audio communication line 12 extending between the operations center 10 and the remote booth 11e in response to standard telephone touch tone or pulses, the dispenser **decoder** 24 generates **control signals** or instructions for individually controlling the bins 23 to selectively dispense the automobile **keys** or other items.

Alternatively, the **decoder** 24 may complete individual 5 dispenser control circuits in response to the touch tones.

As in the case of the decoder 20, the decoder 24...

17/3,K/61 (Item 20 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00134709 **Image available**

METHOD AND APPARATUS FOR CREATING ENCRYPTED AND DECRYPTED TELEVISION SIGNALS

PROCEDE ET DISPOSITIF POUR CREER DES SIGNAUX DE TELEVISION CRYPTES ET DECRYPTES

Patent Applicant/Assignee:

SCIENTIFIC ATLANTA INC,

Inventor(s):

LOWRY John D,

LUCAS Keith,

Patent and Priority Information (Country, Number, Date):

Patent: WO 8607226 A1 19861204

Application: WO 86US825 19860417 (PCT/WO US8600825)

Priority Application: US 85301 19850521

Designated States: AT AT AU BB BE BG BR CH CH DE DE DK FI FR GB GB HU IT JP
KP KR LK LU LU MC MG MW NL NL NO RO SD SE SE SU

Publication Language: English

Fulltext Word Count: 7849

Fulltext Availability:

Detailed Description

Detailed Description

... the trans

mitter end during the creation of a MAC signal and to decrypt the created signal at the receiver end for display on a **television** receiver.

Thus, the line store of Figure 12 may be used to replace stores 14 and 21 shown in Figure 3 to create an encrypted signal with respect to store 14 and to create a decrypted signal with respect to store 21.

As shown in Figure 9, an **encryption / decryption key** is supplied to networks 23 which controls the generation of **control signals** for the ... signals 30 and 31 and output

select signal 32. Depending on the type of memories used for the memory elements within the line store, the **control signals** may also include read, write and memory refresh signal&

Figures 16a and 16b are diagrams illustrating the signals input and output from the line store...

TI DIGITAL VIDEO ANTICOPY PROPOSALS DUE
SO Video Week, (1 Aug 1994) pp. N/A.
ISSN: 0196-5905.
LA English
WC 737

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Unspecified "legislated" anticopy solution is expected to emerge in Washington within next month or 2 covering copyright implications of next generation of digital recorders, Macrovision Senior Vp William Krepick said at VSDA convention in Las Vegas last week. Others said talks were progressing in "legislative context" but denied any timetable is in sight.

Krepick said his observation on impending development was based on feedback he received in week of presentations to Japanese manufacturers in which he said Macrovision received tepid response to proposal that all future digital TVs, VCRs and videodisc players contain its newly developed digital anticopy system (VW July 11 p2). Krepick's contention immediately was disputed by EIA Consumer Electronics Group Vp Gary Shapiro, who revealed that his group has been involved for last 2-3 years in "ongoing" discussions on digital VCR technology and declared that if copyright breakthrough were imminent, "it's news to me." MPAA spokeswoman said she wasn't aware personally of Assn.'s being involved in such talks.

Krepick said Macrovision hasn't received definitive rejections after pitching its Intellectual Property Protection System (IPPS) proposal in round of meetings with Japanese manufacturers, including JVC, Matsushita, Sony and trade group Japan Video Assn. However, he said manufacturers seemed to favor federal legislation similar to Audio Home Recording Act (AHRA) governing home copying of consumer digital audio recorders and blank media.

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L1 ANSWER 45 OF 45 PROMT COPYRIGHT 2004 Gale Group on STN

AN 94:289592 PROMT

TI Digital Chips To Carry Macrovision Anti-Copy System
Obtains license to use copy protection tech in its digital integrated circuits

SO Multichannel News, (6 Jun 1994) pp. 8.
ISSN: 0276-8593.

LA English
WC 444

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB By PETER LAMBERT

Texas Instrument Corp. has licensed Macrovision Corp.'s video copy -protection technology and will integrate it into TI's line of digital video compression integrated circuits.

General Instrument Corp. has tapped TI as its primary supplier of compression chips, which GI will build into digital cable set-tops due out next year.

Macrovision hopes the mass deployment of anti-copy technology into cable pay -per-view services will persuade Hollywood studios to provide earlier release windows for that market.

But getting to that point could involve the development of yet another generation of anti-copy technology beyond the TI-Macrovision agreement, since a new generation of digital VCRs could bypass the set-top.

Macrovision says its anti-copy system has been applied to more than 800 million analog video cassettes in the tape rental and sales market since 1985. But Macrovision experiments with **scrambling** and modulation techniques for the analog PPV environment have yielded only about 50 percent effectiveness in distorting unauthorized pictures, said Bill Krepick, senior vice president for Macrovision.

Now TI and Macrovision believe their agreement will carry the technology successfully into the on-line digital market.

Krepick said the licensing model will allow a copyright owner to decide whether to apply copy protection to a specific PPV, video CD or digital

VHS release. Consequently, the TI chips could give cable and satellite distributors the opportunity to gain earlier access to newly released movies.

THIS IS AN EXCERPT: Copyright 1994 Diversified Publishing Group

=>

video signal played back from the disk is detected, or if the specific anti-duplication control signal is not detected, the video signal recorded in the disk is judged to be an illegally duplicated video signal, and the output control signal generation section controls the output control section so as not to output the playback video signal S4.

L1 ANSWER 38 OF 45 COPYRIGHT 2004 Gale Group on STN

AN 2002:151590 NLDB
TI Product Source 2002.
SO Broadcast Engineering, (1 Jun 2002) .
ISSN: ISSN: 0007-1994.
PB PRIMEDIA Business Magazines & Media
DT Newsletter
LA English
WC 11793

L1 ANSWER 39 OF 45 COPYRIGHT 2004 Gale Group on STN

AN 94:251015 NLDB
TI DIGITAL VIDEO ANTICOPY PROPOSALS DUE
SO Video Week, (1 Aug 1994) Vol. 15, No. 30.
ISSN: 0196-5905.
PB Warren Publishing, Inc
DT Newsletter
LA English
WC 737

L1 ANSWER 40 OF 45 COPYRIGHT 2004 Gale Group on STN

AN 94:247444 NLDB
TI DIGITAL VIDEO ANTICOPY PROPOSALS DUE
SO Consumer Electronics, (1 Aug 1994) Vol. 34, No. 31.
ISSN: 0497-1515.
PB Warren Publishing, Inc
DT Newsletter
LA English
WC 734

L1 ANSWER 41 OF 45 COPYRIGHT 2004 Gale Group on STN

AN 94:247277 NLDB
TI COPYRIGHT ACTION IMMINENT ON DIGITAL VCRs -- MACROVISION
SO Audio Week, (1 Aug 1994) Vol. 6, No. 30.
ISSN: 1044-7601.
PB Warren Publishing, Inc
DT Newsletter
LA English
WC 821

L1 ANSWER 42 OF 45 PROMT COPYRIGHT 2004 Gale Group on STN

AN 2001:894953 PROMT
TI Testing Of MPEG-2 Set-Top Boxes Must Be Fast, Thorough: In approximately 10 seconds, individual tests must verify that a fully functional set-top box will be delivered to the consumer. (Test & Measurement).
AU Kucera, Dennis
SO Electronic Design, (19 Nov 2001) Vol. 49, No. 24, pp. 62(4).
ISSN: 0013-4872.
PB Penton Media, Inc.
DT Newsletter
LA English
WC 2176

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB In a relatively short time, MPEG encoding technology has completely changed the landscape of television content delivery to consumers. Whether through satellite, cable, or over-the-air, the efficiencies of MPEG-2 compression have enabled a veritable revolution within these industries, leading to set-top box development.

THIS IS THE FULL TEXT: COPYRIGHT 2001 Penton Media, Inc.

Subscription: \$105.00 per year. Published semimonthly. Subsidiary of Pittway Company, San Jose Gateway, Suite 354, 2025 Gateway Pl., San Jose, CA 95110.

L1 ANSWER 43 OF 45 PROMT COPYRIGHT 2004 Gale Group on STN

AN 1998:204377 PROMT
TI In The Trenches, Part 1
AU Shupe, Rich
SO Interactivity, (Apr 1998) pp. 33.
ISSN: 1077-8047.
LA English
WC 4622

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Developers Draw a Bead on a Moving Target
Depending on whom you talk to, DVD stands far Digital Video Disc, Digital Versatile Disc, or nothing at all. I prefer the latter. It's less confusing, and it makes it possible for me to write "DVD disc" in this article without feeling like a fool.
If the acronym doesn't stand for anything, then what, precisely, is DVD? In simple terms, it's the next evolutionary step in digital optical disc technology -- a faster CD with a much bigger capacity. The minimum spin speed of a current second-generation DVD drive, for example, is equivalent to that of a 16x CD drive, and a DVD disc holds up to 25 times as much data as a CD. That's room for more than eight hours of high-quality video on a single disc!
But a DVD is much more than a size-XXL CD. The DVD format was designed to deliver videophile and audiophile features to the consumer market, including better-than-Laserdisc video quality; better-than-CD audio quality; multiple aspect ratios, camera angles, soundtracks, and subtitles: interactive playback; and more.
Although a long period of co-existence is to be expected, eventually DVD is likely to replace CD-ROM and Laserdisc. Many people believe DVD will replace audio CDs, videotapes, and game cartridges as well. Only time will tell if the new format can overcome the widespread acceptance and massive installed bases of its predecessors before yet another quantum leap in data storage technology arrives.
DVD Compared to CD
To the naked eye, a DVD disc is nearly identical to a CD. Both formats are 12cm in diameter and 1.2mm thick, with a center spindle hole of 15mm. DVD, however, differs in several important ways, all of which contribute to the format's substantially greater storage capacities.
First, a DVD disc's pits and lands (the areas between the pits) are less than half as large and more than four times as close together as those in a CD (Fig. 1). This is possible because the wavelength of a DVD laser is shorter than the wavelength of a CD laser. A DVD drive uses a red laser with a wavelength of 635 to 650 nanometers, while a CD drive uses an infrared laser with a wavelength of 780 nanometers.
Second, DVD discs are made up of two 0.6mm sides (referred to as substrates) bonded together to form one disc. Each substrate can contain data, making it possible to create a double-sided disc (Fig. 2).

THIS IS AN EXCERPT: COPYRIGHT 1998 Miller Freeman Inc.

L1 ANSWER 44 OF 45 PROMT COPYRIGHT 2004 Gale Group on STN

AN 94:378275 PROMT

File 347:JAPIO Oct 1976-2003/Oct(Updated 040202)

(c) 2004 JPO & JAPIO

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200416

(c) 2004 THOMSON DERWENT

Set	Items	Description
S1	278393	CONTROL(1W)(SIGNAL? ? OR DATA OR INFORMATION OR HEADER? ? - OR BIT? ? OR BYTE? ? OR PACKET? ? OR FRAME? ? OR DATAFRAME? ? OR DATAGRAM? ? OR MESSAGE? ? OR BEAM? ? OR TEXT OR CHARACTER? ? OR STRING? ? OR NUMBER? ? OR CODE? ?)
S2	214939	KEY? ?
S3	207	S1(10N)S2(10N)(DECRYPT? OR DECIPHER? OR DECYPHER? OR UNENC- IPHER? OR UNENCRYPT? OR UNCIPHER? OR UNLOCK? OR ENCRYPT? OR E- NCIPHER? OR ENCYPHER?)
S4	324	S1(10N)S2(10N)(CIPHER? OR CYPHER? OR SCRAMBL? OR ENCOD? OR DECOD??? OR UNSCRAMBL? OR DESCRAMBL??? OR UNENCOD? OR UNCOD?)
S5	261668	(OPTIC? OR RECORD??? OR REMOVABLE)(1W)(MEDIA OR MEDIUM)
S6	1016583	DISC? ? OR DISK? ? OR DISKETTE?? OR CDROM?? OR CD? ? OR CDR OR CDRW OR DVD?? OR DVDROM?? OR DVDDRAM?? OR DIVX OR MINIDISK? ? OR MINIDISC? ? OR CASSETTE? ? OR TAPE OR TAPES OR DAT OR D- ATS OR FLOPPY OR FLOPPIES
S7	2854854	(CABLE OR SATELLITE)(1W)(SIGNAL? ? OR TRANSMISSION? ? OR T- RANSMIT? OR COMMUNICAT? OR RECEIVER? ?) OR TV OR TELEVISION OR VIDEO? OR MOVIE? ? OR FILM? ? OR IMAGE? ?
S8	16782	SETTOP? ? OR SET()TOP? ? OR CABLE(1W)(DEVICE? ? OR UNIT? ? OR APPARATUS?? OR MODULE? ? OR EQUIPMENT OR HARDWARE OR MACHI- NE OR BOX OR BOXES OR DECODER? ? OR TRANSCEIVER? ? OR TERMINA- L? ?)
S9	178	S3:S4 AND S5:S8
S10	24	S3:S4 AND S5
S11	59	S3:S4 AND S6
S12	53	S11 NOT S10
S13	6	S3:S4 AND S8
S14	6	S13 NOT (S10 OR S12)
S15	95	S9 NOT (S10 OR S12 OR S14)

10/5/13 (Item 13 from file: 347)
DIALOG(R)File 347:JAPIO
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03195187 **Image available**
METHOD AND DEVICE FOR RECORDING AND REPRODUCING SCRAMBLED PICTURE

PUB. NO.: 02-170687 [JP 2170687 A]
PUBLISHED: July 02, 1990 (19900702)
INVENTOR(s): YAMADA YOSHIHIRO
SUDO SHIGEYUKI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 63-323275 [JP 88323275]
FILED: December 23, 1988 (19881223)
INTL CLASS: [5] H04N-005/92; G11B-020/02
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 42.5 (ELECTRONICS --
Equipment)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video Tape Recorders, VTR); R102
(APPLIED ELECTRONICS -- Video Disk Recorders, VDR)
JOURNAL: Section: E, Section No. 980, Vol. 14, No. 437, Pg. 88,
September 19, 1990 (19900919)

ABSTRACT

PURPOSE: To eliminate probability that uncomfortable video is outputted and
to improve the convenience for use by recording a picture signal, which is
not scrambled, for display of a warning picture in a recording position on
a **recording medium** which will be reproduced before a scrambled picture
signal.

CONSTITUTION: When a picture will be recorded after being scrambled, a
secret recording button is selected to set the secret recording mode. A
control circuit 100 temporarily connects a changeover switch 800 to a
warning display circuit 300. This circuit 300 outputs a warning video,
namely a video signal, which indicates that the recorded signal is
scrambled, by the indication of the control circuit 100. After a certain
time, the control circuit 100 short-circuits the changeover switch 800 to
the video input. After this certain time, a recording system signal
processing circuit 400 **scrambled** the video signal based on a **cipher**
key, which is inputted from a **key** input part 200 and is stored in a
cipher key register 600, by the indication of a **control signal** (i).

10/5/24 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004223460
WPI Acc No: 1985-050339/198509
XRPX Acc No: N85-037514

Subscription TV descrambling system - has switch control for detecting
polarity inverted portions of scrambled control signal and polarity
inverted field of scrambled video

Patent Assignee: SONY CORP (SONY)
Number of Countries: 009 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 8430263	A	19850110	AU 8430263	A	19840704	198509 B
JP 60016082	A	19850126	JP 83123614	A	19830707	198510
EP 134656	A	19850320	EP 84304655	A	19840706	198512
BR 8403390	A	19850618				198531
US 4635113	A	19870106	US 84626155	A	19840629	198704
CA 1226060	A	19870825				198738
EP 134656	B	19891123				198947
DE 3480583	G	19891228				199002

Priority Applications (No Type Date): JP 83123614 A 19830707
Cited Patents: A3...8612; No-SR.Pub; US 3924059; US 4024576

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
AU 8430263	A		22		
EP 134656	A	E			
Designated States (Regional): DE FR GB NL					
EP 134656	B	E			
Designated States (Regional): DE FR GB NL					

Abstract (Basic): AU 8430263 A

Horizontal and vertical sync. pulses are separated by a separating circuit (23). Simultaneously, a code detector (24) detects the key code signal based on the separated horizontal and vertical sync. pulses. A pulse generator (25) generates a detecting pulse for detecting a turn-up level (VM') based on the sync. pulses. The signal from clamping (22) is supplied to a detecting circuit (26) for detecting the turn-up level (VM') in accordance with the detecting pulse from the generator (25). An inverse level generator (27) provides an inverse level or turn-up level for descrambling in accordance with the level Vm'. A switching circuit (29) recovers the scrambling pattern in accordance with the detected key code signal and the detected level (VM') or ID signal. The switching control circuit (29) then detects a scrambling pattern consisting of the level-inverted period and the non-inverted period of the input composite signal. The switching circuit (29) generates a descrambling signal, and a switch (30) is changed over in accordance with level-inverted and non-inverted periods. ADVANTAGE - Has minimised flicker.

9/10

Title Terms: SUBSCRIBER; TELEVISION; SYSTEM; SWITCH; CONTROL; DETECT;
POLARITY; INVERT; PORTION; SCRAMBLE; CONTROL; SIGNAL; POLARITY; INVERT;
FIELD; SCRAMBLE; VIDEO

Index Terms/Additional Words: SUBSCRIBER

Derwent Class: W02; W03

International Patent Class (Additional): H04N-007/16

File Segment: EPI

12/5/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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07750730 **Image available**

VIDEO SIGNAL REPRODUCING METHOD AND APPARATUS, SIGNAL TRANSMITTING METHOD
AND APPARATUS, AND VIDEO SIGNAL REPRODUCING AND RECORDING COMBINATION
APPARATUS AND METHOD

PUB. NO.: 2003-244635 [JP 2003244635 A]
PUBLISHED: August 29, 2003 (20030829)
INVENTOR(s): SAKO YOICHIRO
YONEYAMA SHIGEYUKI
APPLICANT(s): SONY CORP
APPL. NO.: 2003-004939 [JP 20034939]
Division of 2000-140814 [JP 2000140814]
FILED: May 16, 1996 (19960516)
PRIORITY: 07-185724 [JP 95185724], JP (Japan), July 21, 1995 (19950721)
07-185725 [JP 95185725], JP (Japan), July 21, 1995 (19950721)
INTL CLASS: H04N-005/91; G11B-020/10; G11B-020/12; H04N-009/79

ABSTRACT

PROBLEM TO BE SOLVED: To obtain an analog video signal wherein unauthorized
copying is prevented when a digital disk medium is reproduced.

SOLUTION: An encrypted video signal digitally scrambled by using key
information, a video recording control code to control a mode of a
reproducing state, and the key information are recorded on an optical
disk D. In the case of reproducing the optical disk, the key
information and a state of the video recording control code are
detected, a descrambling circuit 31 descrambles the encrypted video
signal by using the detected key information, an analog video signal
wherein unauthorized copying is prevented is outputted on the basis of the
detected video recording control code from an analog video signal
converted from digital data. The initial value for descrambling is set on
the basis of the detected key information.

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12/5/15 (Item 15 from file: 347)
DIALOG(R)File 347:JAPIO
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05217116 **Image available**

SCRAMBLE TRANSMISSION METHOD, SCRAMBLER, SCRAMBLED SIGNAL REPRODUCTION
METHOD, DESCRAMBLER AND SCRAMBLED SIGNAL REPRODUCING DEVICE

PUB. NO.: 03-172616 [JP 8172616 A]
PUBLISHED: July 02, 1996 (19960702)
INVENTOR(s): KATSUTA NOBORU
MURAKAMI HIRONORI
IBARAKI SUSUMU
NAKAMURA SEIJI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 06-313895 [JP 94313895]
FILED: December 19, 1994 (19941219)
INTL CLASS: [6] H04N-007/167; H04K-001/04; H04L-009/00; H04L-009/10;
H04L-009/12
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 44.2 (COMMUNICATION --
Transmission Systems); 44.3 (COMMUNICATION -- Telegraphy)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video Tape Recorders, VTR);
R102 (APPLIED ELECTRONICS -- Video Disk Recorders, VDR)

ABSTRACT

PURPOSE: To obtain the scramble transmission method and the scrambler in
which a displeasure feeling of a reproduced image of a reproduction device
inhibiting descrambling is avoided.

CONSTITUTION: A scrambler 11 applies scramble processing to transmission data, and generates an effect **control signal** instructing the reproduction method to a receiver side inhibiting **descrambling** and sends the signal with a **scramble key**. A **descrambler** 12 applies permission discrimination of **descrambling** and when permitted, the data are **descrambled** to reproduce a **scramble signal** and when no release is allowed, a scramble signal is reproduced according to the effect **control signal**.

12/5/17 (Item 17 from file: 347)
DIALOG(R)File 347:JAPIO
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04801289 **Image available**
OPTICAL DISK DEVICE

PUB. NO.: 07-093889 [JP 7093889 A]
PUBLISHED: April 07, 1995 (19950407)
INVENTOR(s): MIURA KAZUO
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 05-238371 [JP 93238371]
FILED: September 24, 1993 (19930924)
INTL CLASS: [6] G11B-020/10
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)
JAPIO KEYWORD: R002 (LASERS); R131 (INFORMATION PROCESSING -- Microcomputers
& Microprocessors); R138 (APPLIED ELECTRONICS -- Vertical
Magnetic & Photomagnetic Recording)

ABSTRACT

PURPOSE: To realize miniaturization, improving noise suppression and low manufacturing cost of circuit constitution.

CONSTITUTION: An optical unit 10 reads out a reproduced signal. A RF circuit 20 generates a signal modulating signal for servo. A servo signal processing circuit 30 performs servo processing of focus, tracking and the like through a servo driving circuit 40. A MOS type LSI100 performs system control such as sequence control of servo **control**, **disk information control**, pull-in of a **key**, display control, mute control and the like for a digital signal processor which performs **decode** of a modulated signal, generation of a reproduced signal and spindle servo through a servo driving circuit. While, this device is also constituted so that a microcomputer which performs system control for a servo signal processing circuit is integrated.

12/5/18 (Item 18 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

03238506 **Image available**
MULTIPLE RECORDING AND REPRODUCING DEVICE

PUB. NO.: 02-214006 [JP 2214006 A]
PUBLISHED: August 27, 1990 (19900827)
INVENTOR(s): OTEGI SHUICHI
NAGASHIMA SATORU
APPLICANT(s): VICTOR CO OF JAPAN LTD [000432] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 01-034163 [JP 8934163]
FILED: February 14, 1989 (19890214)
INTL CLASS: [5] G11B-005/027
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR)
JOURNAL: Section: P, Section No. 1129, Vol. 14, No. 512, Pg. 111,
November 09, 1990 (19901109)

ABSTRACT

PURPOSE: To easily perform multiple recording by providing recording and reproducing heads, A/D and D/A converters, an encoder and a decoder, etc., and mixing another melody on the same track as reproducing the melody already recorded on a **tape**.

CONSTITUTION: The signals of channels 1 and 3 reproduced from the **tape** T, after being amplified by a reproducing amplifier 7, are supplied to the decoder 8, then, error correction, etc., is performed. After satisfactory recording is confirmed, the signals of the channels 1 and 3 are switched so as to be supplied from the **decoder** 8 to the **encoder** 4 by operating a ch selection **key** 12. Thereby, a **control signal** is supplied from a ch switching signal generator 11 to the **decoder** 8, and only the sound of the channels 1 and 3 are outputted to the encoder 4 and the D/A converter 9, and a digital signal from the decoder 8 is allocated on the channels 1 and 3, and a signal in which the signal from the decoder 8 is synthesized with the signal from the A/D converter 3 is allocated on channels 2 and 4. And another melody can be inputted from an input terminal by depressing a mixing recording button, reproducing the melody already recorded on the **tape** by the heads A and B, and as listening the melody with speakers SL and SR.

12/5/20 (Item 20 from file: 347)

DIALOG(R) File 347:JAPIO

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999,98 **Image available**

ELECTRONIC EQUIPMENT CONTROL DEVICE

PUB. NO.: 01-296898 [JP 1296898 A]

PUBLISHED: November 30, 1989 (19891130)

INVENTOR(s): MIYAMURA TOSHIHIKO

MOTOYAMA YOSHIAKI

ITO AKIRA

APPLICANT(s): NEC HOME ELECTRON LTD [000193] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 63-127362 [JP 88127362]

FILED: May 25, 1988 (19880525)

INTL CLASS: [4] H04Q-009/02; H04Q-009/00

JAPIO CLASS: 22.3 (MACHINERY -- Control & Regulation)

JAPIO KEYWORD: R002 (LASERS); R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR); R102 (APPLIED ELECTRONICS -- Video **Disk** Recorders, VDR)

JOURNAL: Section: E, Section No. 891, Vol. 14, No. 89, Pg. 15, February 19, 1990 (19900219)

ABSTRACT

PURPOSE: To operate the reservation action of electronic equipment with exceeding an action mode which can be reserved with the electronic equipment by transmitting a remote control signal to the electronic equipment when an output timing of a reserved items stored into a computer device arrives.

CONSTITUTION: A CPU 2 of a computer device 1 fetches the time information of the first reserved item from the reservation data area of a memory 3. When the time information corresponds to a phenomenon time due to a timer 3, the CPU 2 fetches key corresponding data at such a time stored in the memory 3, outputs them to a data latch circuit 24, and outputs prescribed address data to an address **decoding** circuit 23. At such a time, in a remote **control signal** generator 20, a matrix circuit 25 converts the data into **key** switching signals according to the key corresponding data latched by a latch circuit 24, and a remote control signal generating circuit 26 outputs the remote control signal corresponding to the key switching signal.

12/5/22 (Item 22 from file: 347)

DIALOG(R)File 347:JAPIO
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02788703 **Image available**

KEY CODE PROCESSING SYSTEM FOR MAGNETIC RECORDING AND REPRODUCING DEVICE

PUB. NO.: 01-086303 [JP 1086303 A]
PUBLISHED: March 31, 1989 (19890331)
INVENTOR(s): IIDA AKIHIRO
 KOGA TAKASHI
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
 (Japan)
APPL. NO.: 62-243121 [JP 87243121]
FILED: September 28, 1987 (19870928)
INTL CLASS: [4] G11B-005/02
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR)
JOURNAL: Section: P, Section No. 900, Vol. 13, No. 316, Pg. 105, July
 18, 1989 (19890718)

ABSTRACT

PURPOSE: To allow only a specific viewer to observe an excellent reproduced picture by recording a **key** data representing the application of **scramble** in a form of duty modulation of a **control signal**.

CONSTITUTION: A recording control signal outputted from a duty modulator 22 is fed to a control head 23 via a switch SW 1. On the other hand, a key code (m-digit decimal number) inputted by the user operation is fed to the input terminal 24. The control signal on a control track includes a key code representing the application of scramble to the recording signal in a form of duty modulation. In applying de- **scramble** to demodulate a **key** code from the reproduced **control signal**, so long as the same data as the **key** code is not operated, the de- **scramble** command cannot be obtained. Thus, so long as the **key** code is not stolen, the video signal recorded by the user itself cannot be intercepted carelessly by a third party.

12/5/23 (Item 23 from file: 347)

DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

02551989 **Image available**

INFORMATION MANAGEMENT SYSTEM FOR MAGNETIC **TAPE** FILE

PUB. NO.: 63-168889 [JP 63168889 A]
PUBLISHED: July 12, 1988 (19880712)
INVENTOR(s): TAKAMORI HIROSHI
 SAWASE TERUMI
APPLICANT(s): HITACHI MAXELL LTD [000581] (A Japanese Company or
 Corporation), JP (Japan)
 HITACHI LTD [000510] (A Japanese Company or Corporation), JP
 (Japan)
APPL. NO.: 61-315839 [JP 86315839]
FILED: December 29, 1986 (19861229)
INTL CLASS: [4] G11B-023/30
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR)
JOURNAL: Section: P, Section No. 789, Vol. 12, No. 441, Pg. 21,
 November 21, 1988 (19881121)

ABSTRACT

PURPOSE: To easily manage information recorded on a magnetic **tape** by storing the information recorded on a magnetic **tape** medium in a semiconductor module set at a part of a **tape** storing body.

CONSTITUTION: A semiconductor module 102 consisting of a memory element and/or an information processing semiconductor element is stored in a

magnetic **tape** file 100 independently of a magnetic **tape** 101. The module 102 stores the recorded contents of the **tape** 101, the recorded position on the **tape** 101, the recording date, the stop position, the enciphering information, the **decoding key** word for said **enciphering** information, and other **control information** like index information, etc. Thus instantaneous and continuous recording or reproducing actions can be performed in the next recording or reproducing state by reading the management information out of the module 102 to give quick access to the **tape** 101 or storing the interrupted positions of the recording or reproducing actions when the **tape** 101 is used.

12/5/24 (Item 24 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

02333634 **Image available**
VIDEO **TAPE** RECORDER WITH REMOTE CONTROL FUNCTION

PUB. NO.: 62-250534 [JP 62250534 A]
PUBLISHED: October 31, 1987 (19871031)
INVENTOR(s): SATO MASAHICO
OKADA YOSHIKI
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 61-093453 [JP 8693453]
FILED: April 24, 1986 (19860424)
INTL CLASS: [4] G11B-015/02; G11B-031/00; H04N-005/782; H04Q-009/00
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment); 22.3 (MACHINERY -- Control &
Regulation); 44.6 (COMMUNICATION -- Television)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR)
JOURNAL: Section: P, Section No. 691, Vol. 12, No. 125, Pg. 141, April
19, 1988 (19880419)

ABSTRACT

PURPOSE: To obtain a video **tape** recorder in which channel preset is applied even when number of keys is reduced easily even at factory shipping by applying the preset of a reception channel by the key operation of a transmission unit.

CONSTITUTION: The video **tape** recorder 1 has an operation mode changeover control means equipped with the electronic tuner of, e.g., the voltage synthesizer system and comprising an IC **decoding** a supplied signal, and a preset means. A **control signal** generated from the transmission unit 2 by operating each **key** is received by the video **tape** recorder 1, fed to the operation mode changeover control means normally and the operation such as video recording/ reproduction/fast feed/rewinding or channel selection is applied based on the control signal. On the other hand, when a preset key 19 is depressed, the preset mode is obtained, and the received control signal is fed to the preset means and the reception channel is preset based on the control signal.

12/5/25 (Item 25 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

02333632 **Image available**
IMAGE DISPLAY DEVICE

PUB. NO.: 62-216592 [JP 62216592 A]
PUBLISHED: September 24, 1987 (19870924)
INVENTOR(s): HORII KAZUYA
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 61-060107 [JP 8660107]
FILED: March 18, 1986 (19860318)
INTL CLASS: [4] H04N-007/10; G06F-003/12; G06F-003/153; G06K-015/12

JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 45.3 (INFORMATION
PROCESSING -- Input Output Units)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR)
JOURNAL: Section: E, Section No. 589, Vol. 12, No. 77, Pg. 126, March
10, 1988 (19880310)

ABSTRACT

PURPOSE: To save the labor that an user makes a note on display picture information by outputting a switching signal corresponding to the operation of a selecting operating means to select either the printing of a static picture or the printing of an animation to a printing means and executing selectively the printing of the static picture or the animation with printing means.

CONSTITUTION: A computer 3 retrieves static picture data stored into an auxiliary recorder 2 by the instruction from a keyboard 4 and transmits them to a decoder 5. At a keyboard 4, printing keys 4a and 4b for an animation and for a static picture are provided, the computer 3, when the printing **key** code is received, transmits respectively the corresponding **control code** to the **decoder 5**, and the **decoder 5**, after the switching signal to a printing device 7 is switched corresponding to the animation or the static picture, transmits a printing starting signal to the printing device 7. At such a time, into the video input terminal of the printing device 7, the video signal to demodulate once an RF video signal from an RF video signal source 1 in a TV 6 is inputted and into a binarization digital data input terminal, black and white data binarizing the static picture data in the decoder 5 are inputted, and either of them is selected and printed based upon the switching signal.

12/5/28 (Item 28 from file: 347)
DIALOG(R) File 347: JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

01285295 **Image available**
KEY CONTROLLER

PUB. NO.: 58-222695 [JP 58222695 A]
PUBLISHED: December 24, 1983 (19831224)
INVENTOR(s): YOSHINO MOTOHIKO
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 57-105962 [JP 82105962]
FILED: June 18, 1982 (19820618)
INTL CLASS: [3] H04Q-009/14; H04N-005/00
JAPIO CLASS: 22.3 (MACHINERY -- Control & Regulation); 44.6 (COMMUNICATION
-- Television)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- Video **Tape** Recorders, VTR);
R131 (INFORMATION PROCESSING -- Microcomputers &
Microprocessors
JOURNAL: Section: E, Section No. 236, Vol. 08, No. 74, Pg. 119, April
06, 1984 (19840406)

ABSTRACT

PURPOSE: To transmit a local key signal with less number of connecting line by converting an output of plural local keys into serial signal and ORing a receiving output of a remote control signal and the serial signal on one connecting line.

CONSTITUTION: An output of the local **keys** 10-25 is converted into the serial signal at a **key matrix encoder** 33 and applied to an OR circuit 35 together with an output signal of a photo diode 27 receiving the remote **control signal**. The output of the OR circuit 35 is applied to a microprocessor 1 for load control via the connecting line 26. The format of the serial signal is constituted the same as the output format of a remote control transmitter (not shown) and the microprocessor 1 processes similarly both the signals. Thus, terminals which have been used for the reception of the local key signals of the microprocessor 1 are used

effectively as other input and output ports.

12/5/38 (Item 10 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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014677022 **Image available**
WPI Acc No: 2002-498079/200253
Related WPI Acc No: 1995-200530; 1996-518986; 1997-310156; 1998-009129;
1998-110064; 1998-286225; 1999-204782; 1999-444465; 2000-013122;
2000-194736; 2000-195398; 2000-365779; 2000-464989; 2000-490584;
2000-647035; 2001-022904; 2001-335855; 2001-357503; 2001-374044;
2001-397673; 2001-425330; 2001-570080; 2001-580828; 2001-581298;
2001-581665; 2001-595705; 2001-607222; 2002-011177; 2002-041658;
2002-062159; 2002-082807; 2002-154357; 2002-163681; 2002-179003;
2002-188040; 2002-205513; 2002-224088; 2002-226224; 2002-235400;
2002-236852; 2002-238913; 2002-239839; 2002-254659; 2002-256143;
2002-268672; 2002-315095; 2002-361599; 2002-361694; 2002-370756;
2002-382444; 2002-391512; 2002-392708; 2002-393501; 2002-394013;
2002-403568; 2002-405083; 2002-413035; 2002-416925; 2002-435593;
2002-470507; 2002-479804; 2002-498923; 2002-507125; 2002-508021;
2002-528580; 2002-556177; 2002-598923; 2002-636862; 2002-642228;
2002-654787; 2002-672857; 2002-691185; 2002-697772; 2003-045908;
2003-074123; 2003-090293; 2003-137905; 2003-140183; 2003-174573;
2003-199024; 2003-238411; 2003-266622; 2003-268467; 2003-275465;
2003-327510; 2003-331365; 2003-353776; 2003-362315; 2003-391983;
2003-392393; 2003-401297; 2003-418353; 2003-418436; 2003-419904;
2003-465734; 2003-492022; 2003-557490; 2003-587433; 2003-597620;
2003-615418; 2003-615425; 2003-655604; 2003-655616; 2003-655715;
2003-656012; 2003-658647; 2003-659691; 2003-687554; 2003-707329;
2003-730410; 2003-767701; 2003-777048; 2003-800216; 2003-800961;
2003-802603; 2003-829683; 2003-897231; 2004-031964; 2004-041644;
2004-059015; 2004-059948; 2004-070353; 2004-098221; 2004-119479;
2004-155399

XRFX Acc No: N02-394153

Audio apparatus e.g. audio tape recorder reproduces audio information
embedded with control signal that is encoded using low level reference
signal

Patent Assignee: DIGIMARC CORP (DIGI-N)

Inventor: RHOADS G B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6363159	B1	20020326	US 93154866	A	19931118	200253 B
			US 94215289	A	19940317	
			US 94327426	A	19941021	
			US 95436134	A	19950508	
			US 97951858	A	19971016	
			US 99441821	A	19991117	

Priority Applications (No Type Date): US 95436134 A 19950508; US 93154866 A
19931118; US 94215289 A 19940317; US 94327426 A 19941021; US 97951858 A
19971016; US 99441821 A 19991117

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6363159	B1		59	H04K-001/00	CIP of application US 93154866
					CIP of application US 94215289
					CIP of application US 94327426
					Cont of application US 95436134
					Div ex application US 97951858
					Cont of patent US 5748763
					CIP of patent US 5768426
					Div ex patent US 6026193

Abstract (Basic): US 6363159 B1

NOVELTY - A control signal is encoded using a low level reference
signal. The control signal is embedded in the audio information and

is represented differently throughout the audio information, according to a **key**. The usage of the audio apparatus is limited in response to the **control signal**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for audio monitoring device.

USE - Audio **tape** recorder with unauthorized copying protection function.

ADVANTAGE - The audio apparatus prevents unauthorized copying of audio signal stored on optically encoded **disks** based on the control signal embedded in the audio signal.

DESCRIPTION OF DRAWING(S) - The figure shows a simple and classic depiction of a digital signal discretized in both axes.

pp; 59 DwgNo 1/27

Title Terms: AUDIO; APPARATUS; AUDIO; **TAPE**; RECORD; REPRODUCE; AUDIO; INFORMATION; EMBED; CONTROL; SIGNAL; ENCODE; LOW; LEVEL; REFERENCE; SIGNAL

Derwent Class: U21; U24; W04

International Patent Class (Main): H04K-001/00

File Segment: EPI

12/5/52 (Item 24 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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01430219 **Image available**

WPI Acc No: 1988-064154/198809

WPIX Acc No: N88-048754

Communication system for non-governmental satellite company - transmits audio information during horizontal blanking interval and teletext and control information during vertical blanking interval

Patent Assignee: SCIENTIFIC-ATLANTA INC (SCAT); SCIENTIFIC ATLANTA INC (SCAT)

Inventor: BATES C; LIM S; LUCAS K; SETH-SMITH N; VAN RASSEL W; YONEDA R; SETHSMITH N; VANRASSEL W

Number of Countries: 018 Number of Patents: 015

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8801463	A	19880225	WO 87US1983	A	19870814	198809 B
AU 8778505	A	19880308				198821
NO 8801628	A	19880815				198838
DK 8801987	A	19880614				198851
EP 318507	A	19890607	EP 87905537	A	19870814	198923
FI 8900683	A	19890213				198940
US 4866770	A	19890912	US 88253320	A	19880930	198946
US 4890321	A	19891226	US 86896261	A	19860814	199008
JP 2500477	W	19900215	JP 87505076	A	19870814	199013
FI 89545	B	19930630	WO 87US1983	A	19870814	199032
			FI 89683	A	19890213	
NO 173630	B	19930927	WO 87US1983	A	19870814	199344
			NO 881628	A	19880414	
EP 318507	B1	19941102	EP 87905537	A	19870814	199442
			WO 87US1983	A	19870814	
DE 3750724	G	19941208	DE 3750724	A	19870814	199503
			EP 87905537	A	19870814	
			WO 87US1983	A	19870814	
EP 318507	A4	19911030	EP 87905537	A	19870000	199519
CA 1339428	C	19970902	CA 544505	A	19870813	199748

Priority Applications (No Type Date): US 86896261 A 19860814; US 86883310 A 19860708

Cited Patents: US 4323921; US 4337483; US 4393404; US 4484217; US 4531020; US 4531021; US 4536791; US 4623920; US 4682360; 4.Jnl.Ref; GB 2118750; US 4292650; US 4605961; US 4636854; US 4694491

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8801463 A E 121

Designated States (National): AU DK FI JP NO

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE
 EP 318507 A E
 Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE
 US 4866770 A 42
 US 4890321 A 38
 FI 89545 B Previous Publ. patent FI 8900683
 NO 173630 B H04N-007/08 Previous Publ. patent NO 8801628
 EP 318507 B1 E 56 H04N-007/04 Based on patent WO 8801463
 Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE
 DE 3750724 G H04N-007/04 Based on patent EP 318507
 Based on patent WO 8801463
 CA 1339428 C H04N-007/08

Abstract (Basic): WO 8801463 A

The system comprises a broadcaster which is adapted to produce a composite signal comprising audio, video, teletext, data and control information, and a decoder at a second location. The composite signal is of predetermined format, comprising an endless sequence of fields, each field including a number of lines. The audio information is transmitted during a horizontal blanking interval and the teletext and control information during a vertical blanking interval.

The control information includes system-wide control information and group decoder and individual decoder control information. The system-wide control information and the group decoder control information are transmitted in a predetermined group of lines of the vertical blanking interval. The individual decoder control information is transmitted on a second predetermined group of the lines of the vertical blanking interval.

USE - Private communications e.g. between head and remote offices.

Title Terms: COMMUNICATE; SYSTEM; NON; SATELLITE; COMPANY; TRANSMIT; AUDIO; INFORMATION; HORIZONTAL; BLANK; INTERVAL; TELETEXT; CONTROL; INFORMATION; VERTICAL; BLANK; INTERVAL

Derwent Class: W02

International Patent Class (Main): H04N-007/04; H04N-007/08

International Patent Class (Additional): H04L-009/00; H04N-001/00; H04N-007/16

File Segment: EPI

14/5/5 (Item 4 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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014678025 **Image available**

WPI Acc No: 2002-499082/200253

Related WPI Acc No: 1996-465320; 1997-363998; 1998-363180; 1999-154174;
1999-154175; 1999-154176; 1999-154177; 1999-154178; 1999-154179;
1999-181268; 1999-243551; 2002-060946; 2002-705909; 2002-722051;
2002-722052; 2003-677663; 2003-898213; 2004-155029

XRFX Acc No: N02-395091

Encrypted service instance decryption in receiver of conditional
access system, involves implementing decryptor of control message
with decrypted multi-session key, to produce session key

Patent Assignee: AKINS G L (AKIN-I); PALGON M S (PALG-I); PINDER H G
(PIND-I); WASILEWSKI A J (WASI-I)

Inventor: AKINS G L; PALGON M S; PINDER H G; WASILEWSKI A J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020044658	A1	20020418	US 95415617	A	19950403	200253 B
			US 957962	P	19951204	
			US 95580759	A	19951229	
			US 96767535	A	19961216	
			US 9754575	P	19970801	
			US 9754578	P	19970801	
			US 98111958	A	19980708	
			US 98127152	A	19980731	
			US 2000488104	A	20000120	
			US 2000748313	A	20001226	
			US 2001881428	A	20010614	

Priority Applications (No Type Date): US 2001881428 A 20010614; US 95415617
A 19950403; US 957962 P 19951204; US 95580759 A 19951229; US 96767535 A
19961216; US 9754575 P 19970801; US 9754578 P 19970801; US 98111958 A
19980708; US 98127152 A 19980731; US 2000488104 A 20000120; US 2000748313
A 20001226

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020044658	A1		52	H04N-007/167	Cont of application US 95415617 Provisional application US 957962 Cont of application US 95580759 Cont of application US 96767535 Provisional application US 9754575 Provisional application US 9754578 Cont of application US 98111958 Cont of application US 98127152 Cont of application US 2000488104 Cont of application US 2000748313

Abstract (Basic): US 20020044658 A1

NOVELTY - An encrypted multi-session key encrypted by a
public key of a set top box (113), is received and decrypted with a
private key of the set top box. A control message (107)
including a decryptor (115) is received together with a service
message. The decryptor is implemented with the decrypted stored
key, to produce a session key used for decrypting the encrypted
service instance (105) of the service message.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a
receiver in conditional access system.

USE - For decrypting encrypted service instance in receiver
(claimed) e.g. set top box of conditional access system e.g. cable
access television (CATV) system or satellite television system.

ADVANTAGE - By providing public key to any other entity that wishes
to communicate, as long as a given entity keeps it's private key
secret, the information that is transmitted by a wired or wireless
medium, is protected against unauthorized access.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of a

conditional access system.

Service instance (105)

Control message (107)

Set top box (113)

Decryptor (115)

pp; 52 DwgNo 1/29

Title Terms: ENCRYPTION; SERVICE; INSTANCE; DECRYPTER; RECEIVE; CONDITION;
ACCESS; SYSTEM; IMPLEMENT; CONTROL; MESSAGE; MULTI; SESSION; KEY; PRODUCE
; SESSION; KEY

Derwent Class: W02; W03

International Patent Class (Main): H04N-007/167

File Segment: EPI

14/5/6 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014037100 **Image available**

WPI Acc No: 2001-521313/200157

XRPX Acc No: N01-386233

Copy protecting system for digital video and audio consumer electronic
device, encrypts information using first shared key, sends it to set -
top box that decrypts information, when first and second shared keys
match

Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG)

Inventor: FREEMAN M; LU J

Number of Countries: 026 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200105150	A1	20010118	WO 2000EP6330	A	20000704	200157 B
EP 1110399	A1	20010627	EP 2000949261	A	20000704	200157
			WO 2000EP6330	A	20000704	
JP 2003504974	W	20030204	WO 2000EP6330	A	20000704	200320
			JP 2001510238	A	20000704	

Priority Applications (No Type Date): US 99461984 A 19991215; US 99143501 P
19990709

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200105150 A1 E 18 H04N-007/16

Designated States (National): JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

EP 1110399 A1 E H04N-007/16 Based on patent WO 200105150

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI

JP 2003504974 W 22 H04L-009/14 Based on patent WO 200105150

Abstract (Basic): WO 200105150 A1

NOVELTY - Point of deployment module (12) generates reply message,
based on request message sent by a set - top box. The reply message
includes control information with copy control information and
stream identifier respectively generating first key in point of
deployment module to encrypt information and second key in set -
top box to decrypt information received from deployment module when
first and second keys match.

DETAILED DESCRIPTION - The system has a point of deployment module
which encrypts the information requested by a set - top box, with the
first shared key generated by the copy control information and
transmits the encrypted information to the set - top box (10). The
set - top box decrypts the encrypted information with the second
shared key generated by the stream identifier of the control
information when the first and second keys match. INDEPENDENT CLAIMS
are also included for the following:

(a) Method of copy protecting information transmitted between
deployment module and host device;

(b) Deployment module;

(c) Host device

USE - For copy protection of data transmitted between deployment module such as point of deployment module and host device, such as **set - top** box, in digital video and audio consumer electronic devices used by consumers to conduct numerous service and transaction for e.g. to receive video, audio and data streams from service provider such as emergency alerting, interactive program guides, impulse pay-per-view, video-on-demand, general messaging and internet services.

ADVANTAGE - Provides a stream identifier which uniquely identifies the transmitted copy protected information. Eliminates the use of the most restrictive copy control information, when multiple content information or elementary streams are received by a deployment module. The control information is incorporated into shared keys to prevent intruders from illegally manipulating the copy protected information.

DESCRIPTION OF DRAWING(S) - The figure shows the copy protecting system.

Set - top box (10)

Deployment module (12)

pp; 18 DwgNo 1/2

Title Terms: COPY; PROTECT; SYSTEM; DIGITAL; VIDEO; AUDIO; CONSUME;

ELECTRONIC; DEVICE; INFORMATION; FIRST; SHARE; KEY; SEND; SET; TOP; BOX;

INFORMATION; FIRST; SECOND; SHARE; KEY; MATCH

Derwent Class: T01; W02; W03

International Patent Class (Main): H04L-009/14; H04N-007/16

International Patent Class (Additional): G06F-012/14; H04L-009/08;

H04N-005/91; H04N-005/92; H04N-007/167

File Segment: EPI

15/5/11 (Item 11 from file: 347)
DIALOG(R)File 347:JAPIO
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04442378 **Image available**
HOME TERMINAL SYSTEM FOR CATV

PUB. NO.: 06-086278 [JP 6086278 A]
PUBLISHED: March 25, 1994 (19940325)
INVENTOR(s): ITAGAKI KENJI
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 04-235005 [JP 92235005]
FILED: September 03, 1992 (19920903)
INTL CLASS: [5] H04N-007/16; H04B-001/06; H04H-001/02
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**); 44.2 (COMMUNICATION --
Transmission Systems); 44.5 (COMMUNICATION -- Radio
Broadcasting
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &
Microprocessors)
JOURNAL: Section: E, Section No. 1570, Vol. 18, No. 342, Pg. 153, June
28, 1994 (19940628)

ABSTRACT

PURPOSE: To prevent a trouble with a subscriber when reception is invalid
by providing a means which releases and resets a CH contract at the time of
a remote control transmission for maintenance.

CONSTITUTION: At the time of the microcomputer operation of a control
circuit part 11a, when received data are CH contract data, and a 1CH is
contracted, the 1CH of an outside memory 13a is contracted. Next, whether
or not the remote control received data are a CH tuning KEY is checked, and
when the remote control received data are the CH tuning KEY, tuned nCH data
are outputted to a tuner 4, and the contract information of the tuned CH is
read from the outside memory 13a. When the read data are the contract data,
a de- **scramble** 4 is turned on. When the remote **control** received **data**
are not the CH tuning **KEY**, whether or not the remote **control** received
data are the contract change KEY of a remote control transmitter 22 for
maintenance is checked. When the remote control received data are the
contract change KEY, the contract information of a tuned nCH is read from
the memory 13a, and the tuned CH and the contract information are displayed
on the screen of a **television** receiver 9.

15/5/12 (Item 12 from file: 347)
DIALOG(R)File 347:JAPIO
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04410424 **Image available**
AGC CIRCUIT OF CATV TERMINAL

PUB. NO.: 06-054324 [JP 6054324 A]
PUBLISHED: February 25, 1994 (19940225)
INVENTOR(s): KITAGAWA MASAYUKI
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 04-204609 [JP 92204609]
FILED: July 31, 1992 (19920731)
INTL CLASS: [5] H04N-007/16; H04N-005/44
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &
Microprocessors)
JOURNAL: Section: E, Section No. 1556, Vol. 18, No. 286, Pg. 108, May
31, 1994 (19940531)

ABSTRACT

PURPOSE: To stabilize the AGC operation of a CATV terminal in a CATV system
where the scramble signal and an NTSC signal of a synchronous compression

system are mixed.

CONSTITUTION: An RF output-type CATV terminal which inputs a high frequency NTSC signal or a high frequency scramble signal and the CATV signal adding a down control signal is provided with an AGC adjusting equipment 12. A status signal which classifies and recognizes the NTSC signal and the scramble signal is transmitted from CPU 3 and adjusts an AGC voltage level fed-back to a tuner 4 so as to remove the influence of a **scramble key** signal which is AM-modulated into the voice signal of the **scramble** signal. Whether a channel selected by the tuner 4 is the **scramble** signal or the NTSC signal is analyzed by CPU 3 from channel information added in the down control signal and the signal is outputted to the AGC adjusting equipment 12.

15/5/16 (Item 16 from file: 347)
DIALOG(R)File 347:JAPIO
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03835025 **Image available**
METHOD AND DEVICE FOR SCRAMBLE CONTROL

PUB. NO.: 04-200125 [JP 4200125 A]
PUBLISHED: July 21, 1992 (19920721)
INVENTOR(s): INOUE TETSUYA
HARADA YASUO
NEZU SHUNICHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 02-333950 [JP 90333950]
FILED: November 29, 1990 (19901129)
INTL CLASS: [5] H04K-001/04; H04N-007/167
JAPIO CLASS: 44.2 (COMMUNICATION -- Transmission Systems); 44.6
(COMMUNICATION -- **Television**)
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &
Microprocessors)
JOURNAL: Section: E, Section No. 1288, Vol. 16, No. 535, Pg. 84,
November 05, 1992 (19921105)

ABSTRACT

PURPOSE: To improve the convenience of use by providing a means deleting forcibly **key** information in a receiver with a **control signal** from a transmission station to the device so that **descrambling** of the receiver once enabling **descrambling** of a transmission signal is disabled.

CONSTITUTION: When it is required to cancel the permission by a transmitter to a receiver which receives **descramble** enable information 10 including a destination code 9, **key** information 6, a **key** identifier 7, and a **key** valid period 8, a **key control information** generating means 14 receiving a device identifier 1 and a key identifier 7 generates key control information 16 including the destination code 9 being the device identifier 1 and information 15 representing invalid key information indicated by the key identifier 7 and sends the information 16 to a receiver via a multiplexer means 4. The receiver uses a destination collation means 20 to input the information 16 to a key collation means 25 when the destination code 9 in the key control information 16 is its own device identifier 1. The collation means 25 uses a key information delete means 26 to delete the relevant key identifier 7 and the key information 6 in pairs from a key storage buffer 21 when the same key identifier as the key identifier 7 sent in the key control information 16 is in existence in the key storage buffer 21.

15/5/17 (Item 17 from file: 347)
DIALOG(R)File 347:JAPIO
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03700886 **Image available**

CATV TRANSFER EQUIPMENT

PUB. NO.: 04-065986 [JP 4065986 A]
PUBLISHED: March 02, 1992 (19920302)
INVENTOR(s): SUGIMOTO AKIHISA
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-174902 [JP 90174902]
FILED: July 02, 1990 (19900702)
INTL CLASS: [5] H04N-007/16; H04N-007/20
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 1219, Vol. 16, No. 275, Pg. 90, June 19, 1992 (19920619)

ABSTRACT

PURPOSE: To simultaneously change the scramble format of a scrambler of CATV system and a TAG signal by scrambling a **video** signal with the scramble control data decoded by a data decoder.

CONSTITUTION: A **video** scrambler 18 scrambles a **video** signal 'l' transmitted from a **video** source 19 according to a **scramble control data signal** 'k' from a data decoder 17, this **video scramble signal** 'm', a clamp signal 'n', and a **key** signal 'p' are transmitted to a **TV** modulator, and the modulator 20 converts it to a **television signal** 'q' of a specified CATV channel to be transmitted through a mixing device 15 to a transmission path. The scramble format of a data wave detector 16 and the device 17 and the scramble format of a scrambler 18 can be changed simultaneously with scramble format change of satellite channel, and the change of a TAG signal is simultaneously controlled.

15/5/18 (Item 18 from file: 347)
DIALOG(R) File 347:JAPIO
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03615787 **Image available**
SUBSCRIPTION DIGITAL AUDIO BROADCAST SYSTEM

PUB. NO.: 03-278687 [JP 3278687 A]
PUBLISHED: December 10, 1991 (19911210)
INVENTOR(s): KITAGAWA KAZUO
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-076611 [JP 9076611]
FILED: March 28, 1990 (19900328)
INTL CLASS: [5] H04N-007/167; H04H-001/00; H04N-001/34; H04N-007/16
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**); 34.4 (SPACE DEVELOPMENT -- Communication); 44.5 (COMMUNICATION -- Radio Broadcasting); 44.7 (COMMUNICATION -- Facsimile)
JOURNAL: Section: E, Section No. 1177, Vol. 16, No. 101, Pg. 84, March 12, 1992 (19920312)

ABSTRACT

PURPOSE: To use only a minimum number of scramble release means at a terminal equipment side even when plural audio channels are received by utilizing a high-order information transmission area.

CONSTITUTION: A multiplexer 12 applies time division multiplex to a **scramble** audio signal, a packet information generator 14 adds a packet data including a **key** to inform a **key** for **scramble** data to a receiver side for the release of the **scramble** of each **scrambled** audio signal, a **control bit** is added to a time division multiplex signal with the packet data added thereto in order to inform the processing timing of the packet data to the receiver side and further, a transmission synchronizing code is added. Thus, a scramble release data is separated before the audio signal is separated to each channel, that is, from a high degree of signal. Thus, even when plural audio channels are received, a minimum number of scramble release means is enough for the terminal equipment.

15/5/19 (Item 19 from file: 347)
DIALOG(R)File 347:JAPIO
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03416283 **Image available**
SUBSCRIPTION BROADCAST RECEIVER

PUB. NO.: 03-079183 [JP 3079183 A]
PUBLISHED: April 04, 1991 (19910404)
INVENTOR(s): ISHIKAWA TOSHIRO
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 01-216903 [JP 89216903]
FILED: August 22, 1989 (19890822)
INTL CLASS: [5] H04N-007/167; H04N-007/16
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 1082, Vol. 15, No. 250, Pg. 124, June
26, 1991 (19910626)

ABSTRACT

PURPOSE: To eliminate waste in the reception of information by controlling the operation of a muting circuit with the OR output of pulses for muting outputted with first and second key update signals and a specific signal after inputting a channel switching timing signal.

CONSTITUTION: Program information from transmission equipment is inputted to the muting circuit 32 via a de- **scrambling** circuit 28, and program contract information and contract information are decided at a view feasibility/ infeasibility deciding circuit 25 when **key** update timing information is inputted, and the AND of view feasibility/infeasibility deciding output and **scramble** on/off information is inputted to the circuit 28. And a mute **control signal** generation circuit 31 which counts two **key** update timing signals after inputting the channel switching signal outputs the pulse 31a for muting and inputs the AND output with the **scramble** on/off information to a control circuit 29, and forms a mute on/off signal with view permission deciding output and the channel switching timing signal, etc., thereby, the muting circuit 32 is controlled.

15/5/22 (Item 22 from file: 347)
DIALOG(R)File 347:JAPIO
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03065590 **Image available**
SIGNAL PROCESSOR

PUB. NO.: 02-041090 [JP 2041090 A]
PUBLISHED: February 09, 1990 (19900209)
INVENTOR(s): HIRASHIMA MASAYOSHI
SATO TOSHICHIKA
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 63-191780 [JP 88191780]
FILED: July 29, 1988 (19880729)
INTL CLASS: [5] H04N-007/167
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 920, Vol. 14, No. 200, Pg. 17, April
24, 1990 (19900424)

ABSTRACT

PURPOSE: To effectively inhibit illegal copy and to prevent interception of a charged broadcast program by extracting a **control signal** such as **decoding key** multiplexed in a TV signal of a charged program or the like by a receiver of a charged **decoder** or the like, applying cryptographic processing with a **key** specific to each terminal equipment and mixing and outputting the result during a horizontal/vertical blanking

period of the original TV signal.

CONSTITUTION: A key detection data extraction circuit 2 extracts a control signal from a TV signal inputted to an input signal P(sub 1) and a decoded key Kt is stored in a Kt memory of a cryptographic decoder 3 and various control signals are decoded. Then the key Kt is subjected to cryptographic processing by a cryptographic device 6 to form a key EKt (Kt) and format conversion circuit 5 applies format conversion. On the other hand, a mixing circuit 4 eliminates a video signal of the nH-th from the output signal of a buffer circuit 1 and the output of the conversion circuit 5 is superimposed and the recording video output is outputted via a buffer circuit 7. Thus, the signal cannot be reproduced by a charged decoder without the key Ki and illegal copy is prevented.

15/5/23 (Item 23 from file: 347)

DIALOG(R)File 347:JAPIO

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03058594 **Image available**

CHARGED TELEVISION SYSTEM

PUB. NO.: 02-034094 [JP 2034094 A]

PUBLISHED: February 05, 1990 (19900205)

INVENTOR(s): UEMURA JUN

APPLICANT(s): MASPRO DENKOH CORP [368465] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 63-185147 [JP 88185147]

FILED: July 25, 1988 (19880725)

INTL CLASS: [5] H04N-007/16

JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 34.4 (SPACE DEVELOPMENT -- Communication

JOURNAL: Section: E, Section No. 917, Vol. 14, No. 187, Pg. 18, April 16, 1990 (19900416)

ABSTRACT

PURPOSE: To attain economy by providing a descrambler descrambling a signal from a channel selection only when a descramble control signal reaches and sending the result to the post stage.

CONSTITUTION: When a charged television signal from a head end 7 is selected by a CATV converter 14 of a subscriber equipment with the contract of charged reception finished already thereto, a data demodulation circuit 44 demodulates a data signal, and whether or not the obtained address is an address of the CATV converter 14 of its own equipment is discriminated by a descramble control signal generating circuit 45, and since both the addresses are coincident, a descramble control signal is outputted. Thus, a key signal detection circuit 42 of the descrambler 40 is operated and a synchronizing signal generating circuit 43 generates a signal based on the detection signal. This is fed to an attenuation control terminal 41a of a variable attenuation circuit 41 and when a television signal of a channel selection 33 is fed to the circuit 41, only the portion of the synchronizing signal passes with less attenuation and the synchronizing signal is sent to the post stage. A normal picture is viewed at the television receiver of the past stage.

15/5/25 (Item 25 from file: 347)

DIALOG(R)File 347:JAPIO

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02711185 **Image available**

TELEVISION RECEIVER

PUB. NO.: 01-008785 [JP 1008785 A]

PUBLISHED: January 12, 1989 (19890112)

INVENTOR(s): SHINPO HIROYASU

KONDO TOMOJI

HENMI HIDEKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 62-164651 [JP 87164651]
FILED: June 30, 1987 (19870630)
INTL CLASS: [4] H04N-007/08
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 751, Vol. 13, No. 184, Pg. 23, April
28, 1989 (19890428)

ABSTRACT

PURPOSE: To output a teletext pattern to a printer at an optional designation time by comparing a time data stored in a memory with a time of a clock circuit and switching on/off a standby power supply circuit when they are coincident.

CONSTITUTION: Information is written in a memory in a remote **control** signal reception processing circuit 2 by **decoding** a signal B through the depression of a **key** of a remote control transmitter. The circuit 2 reads a register representing a time in the clock circuit 3 at all times to compare the time with a print start reservation time in the memory. When they are coincident, a power supply control circuit 4 is controlled to bring the power supply circuit II5 in standby into the operating state. Simultaneously, the circuit 2 sends a program number of a teletext to be decoded in a teletext decoder circuit 9 and a print command signal. The circuit 9 applies the decoding processing of the teletext program to apply the processing to a **video** RAM and transfers the data in the **video** RAM to a printer circuit 10 to apply printing.

15/5/27 (Item 27 from file: 347)
DIALOG(R)File 347:JAPIO
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02344346 **Image available**
PICTURE TRANSMISSION CONTROL SYSTEM

PUB. NO.: 62-261246 [JP 62261246 A]
PUBLISHED: November 13, 1987 (19871113)
INVENTOR(s): OTSUKA HIROICHI
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 61-104390 [JP 86104390]
FILED: May 07, 1986 (19860507)
INTL CLASS: [4] H04L-011/00.
JAPIO CLASS: 44.3 (COMMUNICATION -- **Telegraphy**)
JOURNAL: Section: E, Section No. 605, Vol. 12, No. 146, Pg. 18, May
06, 1988 (19880506)

ABSTRACT

PURPOSE: To attain the picture communication between two nodes by using control information from a picture transmission line setting key pad so as to control the bypass state or communication state of a picture terminal equipment of each node thereby providing a picture terminal equipment to each node of a token ring transmission line.

CONSTITUTION: A broad band local area network 1 is provided with four nodes A-D of the same constitution. The transmission line 1 and the nodes are interfaced with a multiple demultiplexer section 2 mutually, and the demultiplexer section 2 applies multiple demultiplication to a token ring transmission line 3 and a picture transmission line 4. The picture transmission line 4 is connected to the picture terminal equipment 14 via a picture transmission line drawing section 12 and a **video** coder/ **decoder** 13. The node A is provided with a picture transmission line setting **key** pad 15, the **control** information set to the **key** pad 15 is sent to a token passing protocol control section 5 and a picture transmission line control section 11 of each node via a token ring transmission line 3 so as to draw each picture transmission line drawing section 12 of both the two

nodes connected with a picture terminal equipment desired for communication and to bypass each picture transmission line drawing section 12 of the other nodes.

15/5/29 (Item 29 from file: 347)
DIALOG(R)File 347:JAPIO
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02261186 **Image available**
ENCIPHERING DEVICE

PUB. NO.: 62-178086 [JP 62178086 A]
PUBLISHED: August 05, 1987 (19870805)
INVENTOR(s): MURAKAMI ATSUMICHI
UESAWA ISAO
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 61-019557 [JP 8619557]
FILED: January 31, 1986 (19860131)
INTL CLASS: [4] H04N-007/167
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 575, Vol. 12, No. 20, Pg. 110,
January 21, 1988 (19880121)

ABSTRACT

PURPOSE: To obtain an enciphering device which is adaptable to an efficient encoding transmission equipment of animations/still pictures, sound, etc., and has simple constitution and **enciphers** pictures effectively, by providing a means which protects a **cipher key** transmitted with a **control data** channel.

CONSTITUTION: A picture input 310 and a sound input 320 are encoded efficiently by a picture encoding circuit 311 and a sound encoding circuit 321 and are multiplexed by a picture and sound multiplexing circuit 312. The multiplexed output is **enciphered** by an **enciphering** circuit 400 and is multiplexed with **control data** indicating the **cipher key** or the like by a **control data** multiplexing circuit 313, and the output is sent to a line 351 through an interface circuit 350 after error correction encoding in a synchronizing signal adding and error correction encoding circuits 314. In this case, the circuit 400 performs the enciphering operation based on a transmission frame synchronizing signal 130 from a timing control circuit 315 in accordance with a tap coefficient and an initial value after reset by a cipher key 302 determined by a key input 303 outputted from a system control circuit 301.

15/5/30 (Item 30 from file: 347)
DIALOG(R)File 347:JAPIO
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02229187 **Image available**
TELEVISION RECEIVER

PUB. NO.: 62-146087 [JP 62146087 A]
PUBLISHED: June 30, 1987 (19870630)
INVENTOR(s): SHINPO HIROYASU
SHIOTANI YUICHI
KAWASHIMA KAZUMI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 60-288589 [JP 85288589]
FILED: December 20, 1985 (19851220)
INTL CLASS: [4] H04N-007/08; H04N-005/445
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 564, Vol. 11, No. 382, Pg. 88,
December 12, 1987 (19871212)

ABSTRACT

PURPOSE: To use a character multiplex decoder part for an on-screen display by dividing a **video** display memory of a character multiplex decoder part, providing an on-screen area memory and controlling a switching signal from the character multiplex decoder part.

CONSTITUTION: A **video** RAM in the teletext decoder 7 is divided in memory into a presenting area for presenting a picture for the character broadcasting and the on-screen area and by changing over an address of a display address generating circuit, V(sub 0)-V(sub 1)-V(sub 2) can be read vertically and V(sub 3)-V(sub 4)-V(sub 1)-V(sub 2) can be read. The display address generating circuit performs an increment of the address vertically by horizontal synchronizing signal. The horizontal scanning line of the on-screen area for performing the on-screen display is determined previously and according to an on-screen control signal A from a remote control and a **key decoding** part 6, the address of the display address generating circuit is controlled so as to read the on-screen area memory in the on-screen area.

15/5/31 (Item 31 from file: 347)

DIALOG(R) File 347:JAPIO

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02224989 **Image available**

NETWORK INTERFACE TESTING DEVICE FOR **VIDEO** DISTRIBUTION SUBSCRIBER'S DEVICE

PUB. NO.: 62-141889 [JP 62141889 A]

PUBLISHED: June 25, 1987 (19870625)

INVENTOR(s): HISAKI TAKAHIKO

SHIMAMURA KAZUNORI

APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 60-282361 [JP 85282361]

FILED: December 16, 1985 (19851216)

INTL CLASS: [4] H04N-017/00; H04N-007/10; H04N-007/16

JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)

JOURNAL: Section: E, Section No. 562, Vol. 11, No. 374, Pg. 62, December 05, 1987 (19871205)

ABSTRACT

PURPOSE: To conduct a test without using any network installation by simulating all the functions of a **video** distribution subscriber's device and the network when viewed from a subscriber interface toward the network side and testing the **video** distribution subscriber's device singly.

CONSTITUTION: The interface control circuit 22 of a network interface test device 21 separates and multiplexes each of **video** information, an incoming control signal, an outgoing control signal, an incoming selection signal and an outgoing selection signal given from the **video** distribution subscriber's device 13 or to be given to the **video** distribution subscriber's device 13 under the condition of the subscriber interface 17 and the start of outgoing/incoming calls. A selection signal decoder 41, an incoming selection signal register 43, a selection signal setting key 45, an outgoing selection signal register 47 and a selection signal encoder 49 or the like are components simulating the operation of a **video** selecting device. A **control signal decoder** 31, an incoming **control signal register** 32, a **control signal setting key** 35, an outgoing **control signal register** 37 and a **control signal encoder** 35 or the like are components simulating a **control signal** between terminal centers of the **video** information center.

15/5/33 (Item 33 from file: 347)

DIALOG(R) File 347:JAPIO

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02028087 **Image available**
PICTURE SCRAMBLING SYSTEM

PUB. NO.: 61-242187 [JP 61242187 A]
PUBLISHED: October 28, 1986 (19861028)
INVENTOR(s): KAWAI NAOKI
 KIMURA TAKESHI
 NANBA SEIICHI
 SAITO MASANORI
APPLICANT(s): NIPPON HOSO KYOKAI <NHK> [000435] (A Japanese Company or
 Corporation), JP (Japan)
APPL. NO.: 60-083670 [JP 8583670]
FILED: April 19, 1985 (19850419)
INTL CLASS: [4] H04N-007/167; H04K-001/00
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**); 44.2 (COMMUNICATION --
 Transmission Systems
JOURNAL: Section: E, Section No. 491, Vol. 11, No. 92, Pg. 29, March
 24, 1987 (19870324)

ABSTRACT

PURPOSE: To control secrecy of a information and to reduce quality deterioration of the picture recovered with a standard method by converting address data according to a **scramble** effect **control** **signal** in a **key** signal.

CONSTITUTION: An inputted picture signal input is converted to a digital signal with an A/D converter, and is written in one line memory 13 and 14 alternatively. The initial value of a counter is set to any desired value based on the information of the key signal in an address control circuit 12, and reading is initiated from the picture data of one line on the way until it returns to that starting address. This reverses the picture horizontally. After reversing the scan line horizontally, the picture signal is written in one field memories 20 and 21 and reread. In this case, the information of the key signal is supplied to the address control circuit 22 to read a horizontal scanning picture signal random, and to reverse the picture vertically for scramble process

15/5/36 (Item 36 from file: 347)
DIALOG(R)File 347:JAPIO
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00919684 **Image available**
SCRAMBLE SYSTEM FOR **TELEVISION** SIGNAL

PUB. NO.: 57-069984 [JP 57069984 A]
PUBLISHED: April 30, 1982 (19820430)
INVENTOR(s): KOMORI TOSHIO
APPLICANT(s): MARANTZ JAPAN INC [326418] (A Japanese Company or
 Corporation), JP (Japan)
APPL. NO.: 55-147412 [JP 80147412]
FILED: October 21, 1980 (19801021)
INTL CLASS: [3] H04N-007/16
JAPIO CLASS: 44.6 (COMMUNICATION -- **Television**)
JOURNAL: Section: E, Section No. 123, Vol. 06, No. 147, Pg. 94, August
 06, 1982 (19820806)

ABSTRACT

PURPOSE: To give high **encryption**, by performing **scramble** processing for the level of a **TV** signal with a **control** **signal** in a toll **TV** broadcast, and transmitting a **key** signal synchronizing with this control signal through superimposing on the audio signal by means of subcarrier.

CONSTITUTION: A normal synthesized **video** signal CV1 is inputted to a pedestal clamp circuit 21, the synchronizing signal is made constant and a signal CV2 is obtained and branched into three ways, one is applied to a signal selector 23 and another is inputted to a level shift circuit 22, the level is lowered and the signal CV3 is obtained and applied to the switch 23, the remaining one is applied to a synchronizing signal detection

circuit 25 to detect the synchronizing signal. This synchronizing signal is inputted to a control signal generating circuit 26 and a virtual synchronizing signal generating circuit 27, a control signal CS from the circuit 26 is applied to the switch 23, two synthesized signals CV2, CV3 are switched alternately, the output CV4 is mixed at a mixer 28 with the virtual synchronizing signal from a circuit 27 to form a scramble processing synthesized video signal CV5 and transmitted to a video transmitter 1. The signal CS is a key signal at a key signal generating circuit 29 to be superimposed on the audio signal for transmission.

15/5/38 (Item 38 from file: 347)
DIALOG(R)File 347:JAPIO
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00506126
BACK COLOR MIXER

PUB. NO.: 54-158126 [JP 54158126 A]
PUBLISHED: December 13, 1979 (19791213)
INVENTOR(s): MIYAHARA SHIGERU
KASHIKI KAZUO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 53-059162 [JP 7859162]
FILED: May 17, 1978 (19780517)
INTL CLASS: [2] H04N-009/00; H04N-009/535
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)
JOURNAL: Section: E, Section No. 171, Vol. 04, No. 18, Pg. 56,
February 13, 1980 (19800213)

ABSTRACT

PURPOSE: To obtain a simple and stable back color mixer by encoding and then mixing up in a digital way both the video signals and the chrominance signals.

CONSTITUTION: The television video signals sent from input terminal 1 are encoded through A/D converter 2. Back color generator 3 is controlled by the chroma-phase control signals and the key input given from terminal 7 and 8 to generate the back color data. The back color data is added with the encoded video data given from converter 2 at mixer 4 with the level correction given and then converted into the analog signals through D/A converter 5 to be delivered to output terminal 6.

15/5/39 (Item 39 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

00501523
TELEVISION RECEIVER

PUB. NO.: 54-153523 [JP 54153523 A]
PUBLISHED: December 03, 1979 (19791203)
INVENTOR(s): ISHII TOMOHIDE
KAWAMOTO MASAMI
NISHI MASAHIRO
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 53-062727 [JP 7862727]
FILED: May 24, 1978 (19780524)
INTL CLASS: [2] H04N-005/00; H04N-005/44; H04N-009/535
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)
JOURNAL: Section: E, Section No. 169, Vol. 04, No. 14, Pg. 16, January 31, 1980 (19800131)

ABSTRACT

PURPOSE: To control many controlled circuits and channel selection circuits with good operationability finely with a simple constitution, by commonly

using the keyboard for channel selection for the input of adjusting level such as volume, chroma saturation, or brightness.

CONSTITUTION: When either of the selection switches 9a to 9c is not operated at the selection circuit 8, the selection channel is in control state, and when the channel desired for channel selection among the key switches 5a to 5p on the keyboard 5 is operated, digital control signal is produced from the encoder 6, it is fed to the latch circuit 4d via the selection circuit 7 to perform the channel selection for desired channel. Further, when either of volume, chroma saturation or brightness is adjusted, and when either (e.g. 9b) of the switches 9a to 9c is operated, the flip flop 10b is set and the chroma saturation is adjusted, and only the latch circuit 4b receives the digital control signal. Next, the key switch corresponding to the level of desired adjusting state is operated on the keyboard 5.

15/5/78 (Item 39 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010712264 **Image available**
WPI Acc No: 1996-209219/199621
XRPX Acc No: N96-175148

Computer game networking apparatus with central storage - receives game control data from key pad with data modulated to have centre frequency above audible range with computer game displayed on television receiver

Patent Assignee: SASKTEL (SASK-N)
Inventor: KUJAWA K
Number of Countries: 021 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9610450	A1	19960411	WO 95CA547	A	19950928	199621 B
CA 2133384	A	19960331	CA 2133384	A	19940930	199629
AU 9535156	A	19960426	AU 9535156	A	19950928	199631
EP 783353	A1	19970716	EP 95933978	A	19950928	199733
			WO 95CA547	A	19950928	
NZ 292857	A	19980626	NZ 292857	A	19950928	199831
			WO 95CA547	A	19950928	
AU 701012	B	19990121	AU 9535156	A	19950928	199915
US 5904620	A	19990518	WO 95CA547	A	19950928	199927
			US 97809320	A	19970319	
CA 2133384	C	20000725	CA 2133384	A	19940930	200047
EP 783353	B1	20010110	EP 95933978	A	19950928	200103
			WO 95CA547	A	19950928	
DE 69519866	E	20010215	DE 619866	A	19950928	200116
			EP 95933978	A	19950928	
			WO 95CA547	A	19950928	

Priority Applications (No Type Date): CA 2133384 A 19940930
Cited Patents: 01Jnl.Ref; DE 3316804; EP 139405; JP 6245067; US 3937889; WO 9106160

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
WO 9610450	A1	E	28	A63F-009/22	
Designated States (National): AU GB MX NZ US					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
CA 2133384	A			G06F-015/44	
AU 9535156	A			A63F-009/22	Based on patent WO 9610450
EP 783353	A1	E		A63F-009/22	Based on patent WO 9610450
Designated States (Regional): DE FR GB IT					
NZ 292857	A			A63F-009/22	Based on patent WO 9610450
AU 701012	B			A63F-009/22	Previous Publ. patent AU 9535156
					Based on patent WO 9610450
US 5904620	A			A63F-009/22	Based on patent WO 9610450
CA 2133384	C	E		G06F-015/44	
EP 783353	B1	E		A63F-013/00	Based on patent WO 9610450

Designated States (Regional): DE FR GB IT
DE 69519866 E A63F-013/00 Based on patent EP 783353
Based on patent WO 9610450

Abstract (Basic): WO 9610450 A

The networking apparatus includes a key pad interface which receives game control data from a remote game key pad. The game control data is frequency modulated with a centre frequency which is above the audible range and the interface is connected in parallel across a telephone pair.

The modulated data format is communicated to a switched telephone network. The **key** pad interface is positioned within the **key** pad housing. A control interface includes a processor which reads and **encodes game control data** into a serial data format.

USE/ADVANTAGE - E.g. hotel guests. Normal use of telephone network unaffected as high frequency is used.

Dwg.2/7

Title Terms: COMPUTER; GAME; APPARATUS; CENTRAL; STORAGE; RECEIVE; GAME; CONTROL; DATA; KEY; PAD; DATA; MODULATE; CENTRE; FREQUENCY; ABOVE; AUDIBLE; RANGE; COMPUTER; GAME; DISPLAY; **TELEVISION** ; RECEIVE
Derwent Class: P36; W01; W02; W04
International Patent Class (Main): A63F-009/22; A63F-013/00; G06F-015/44
International Patent Class (Additional): H04B-001/02
File Segment: EPI; EngPI

15/5/80 (Item 41 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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010358189 **Image available**
WPI Acc No: 1995-259503/199534
KRPX Acc No: N95-200077

Code communication method - decodes information received through predetermined communication circuit from call side terminal equipment based on reproduced code key

Patent Assignee: MITA IND CO LTD (MTAI)
Inventor: MORI T; NAKAMURA M; OYAMA M; SHIBATA K
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7162692	A	19950623	JP 93306764	A	19931207	199534 B
US 5574789	A	19961112	US 94341205	A	19941205	199651

Priority Applications (No Type Date): JP 93306764 A 19931207

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 7162692	A	7	H04N-001/44	
US 5574789	A	12	H04L-009/16	

Abstract (Basic): JP 7162692 A

The method involves transmission of the information enciphered through a predetermined communication circuit from the call side terminal equipment (1) to the called party terminal equipment. A random number generator (15) generates a random number sequence based on which a call side terminal equipment produces a code key using a control device (11). The NSS of option signal which contains random number sequence is used for generating code key and is transmitted through telephone circuit (3).

The encipherment / decipherment processing device (16) carries out encipherment of **image** data which is transmitted based on the code key. The code key is reproduced at the called party facsimile appts, based on the random number sequence. The received **image** is decoded based on the reproduced code key.

ADVANTAGE - Simplifies process by avoiding need for registering fixed code key in memory. Maintains secrecy of communication by transmitting random number sequence which is used for generating code key.

Dwg.2/6

Title Terms: CODE; COMMUNICATE; METHOD; DECODE; INFORMATION; RECEIVE;
THROUGH; PREDETERMINED; COMMUNICATE; CIRCUIT; CALL; SIDE; TERMINAL;
EQUIPMENT; BASED; REPRODUCE; CODE; KEY
Derwent Class: P85; W01; W02
International Patent Class (Main): H04L-009/16; H04N-001/44
International Patent Class (Additional): G09C-001/06; H04L-009/06;
H04L-009/14; H04N-001/32
File Segment: EPI; EngPI

15/5/81 (Item 42 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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010245793. **Image available**

WPI Acc No: 1995-147048/199519

Related WPI Acc No: 1996-030108

XRPX Acc No: N95-115467

Data and audio signals simultaneous transmission appts using perceptual coding - uses first processing circuit for processing data signal using block encoding and bit interleaving techniques, with data signal then input to three transmission encoders

Patent Assignee: MOSES D W (MOSE-I)

Inventor: MOSES D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5404377	A	19950404	US 94224906	A	19940408	199519 B

Priority Applications (No Type Date): US 94224906 A 19940408

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5404377	A	15	H04K-001/00	

Abstract (Basic): US 5404377 A

The appts includes a device for monitoring the audio signal to determine its perceptual entropy envelope. The monitoring device generates control signals indicative of the determined perceptual entropy envelope. A device, responsive to the **control signals**, is provided for **encoding** the data signal as an frequency shift **key** (FSK) modulated signal and for outputting the FSK modulated signal at times.

Frequencies and levels falls within the determined perceptual entropy envelope of the audio signal when they are combined with the audio signal. The FSK modulated signal is masked by the audio signal. Further the appts includes a device for combining the audio signal with the FSK modulated signal to form a composite signal.

USE/ADVANTAGE - For transmitting low to medium speed data signals over audio channels such as telephone, radio and **TV** channel carrying analog voice and/or music signals. Increased data transmission rate in partial response mode while providing encoding able to 'punch through' most compression algorithms.

Dwg.2/4

Title Terms: DATA; AUDIO; SIGNAL; SIMULTANEOUS; TRANSMISSION; APPARATUS;
CODE; FIRST; PROCESS; CIRCUIT; PROCESS; DATA; SIGNAL; BLOCK; ENCODE; BIT;
INTERLEAVED; TECHNIQUE; DATA; SIGNAL; INPUT; THREE; TRANSMISSION; ENCODE
Derwent Class: T01; W01; W02; W04
International Patent Class (Main): H04K-001/00
File Segment: EPI

15/5/82 (Item 43 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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010134536 **Image available**

WPI Acc No: 1995-035787/199505

XRPX Acc No: N95-028270

Teletext receiver providing latest information e.g. for VCR - has teletext decoder, two memories storing old data and current data, comparator evaluating both data, and control signal generator for serial-parallel data conversion to generate control signal

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU)

Inventor: JUNG T H

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5374961	A	19941220	US 93158570	A	19931129	199505 B
CN 1102744	A	19950517	CN 93114270	A	19931108	199726 N

Priority Applications (No Type Date): US 93158570 A 19931129; CN 93114270 A 19931108

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5374961	A		9 H04N-007/08	
CN 1102744	A		H04N-007/08	

Abstract (Basic): US 5374961 A

The appts. for providing the latest teletext information for a VCR or a colour **television** receiver has a decoder for processing character information. An A/D converter digitises an analogue signal for character data provided from the decoder, and two memories store first data representative of old data and second data indicative of currently provided data, respectively, and outputs the stored data according to a preset control signal. A

comparator evaluates the two sets of data to determine whether if they are identical. A control signal generator converts the parallel data from the comparator into a serial data, integrates the parallel data, then amplifies and limits the integrated data w.r.t a preset DC level, to thereby output a first control signal.

A D/A converter changes only the latest information data stored in a second memory into an analogue signal when two sets of data differ. A controller, upon receipt of a predetermined **key** signal, generates at least one of a **decoder** signal for controlling the **decoder**, a memory **control signal**, a timing signal for controlling a time for the latest information, an executing signal and a character information ON/OFF signal. An address variable device sequentially increases a memory address signal if the two sets of data coincide. A first logical combiner controls a first switch, which selectively provides one of an output of the D/A converter and an output of character information and **television / video** by logically combining the first control signal with the executing signal. A second logical combiner governs a second switch which selectively provides one of the character information and the **television / video** signal to one terminal of the first switch by logically combining an inverted output of the first logical combiner and the character information ON/OFF signal of the controller.

ADVANTAGE - Updates stored data if newly received data differs from that already in memory.

Dwg.1/3

Title Terms: TELETEXT; RECEIVE; LATE; INFORMATION; VCR; TELETEXT; DECODE; TWO; MEMORY; STORAGE; DATA; CURRENT; DATA; COMPARATOR; EVALUATE; DATA; CONTROL; SIGNAL; GENERATOR; SERIAL; PARALLEL; DATA; CONVERT; GENERATE; CONTROL; SIGNAL

Index Terms/Additional Words: **TV** ; RECEIVER

Derwent Class: W03; W04

International Patent Class (Main): H04N-007/08

File Segment: EPI

15/5/85 (Item 46 from file: 350)

ALOG(R)File 350:Derwent WPIX

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009327034 **Image available**

WPI Acc No: 1993-020497/199303

XRPX Acc No: N93-015744

Displaying multiple teletext pages - decoding teletext signals carried on input video signal and separating horizontal synchronising pulses to produce pulse signal

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU)

Inventor: KIM J W

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2257876	A	19930120	GB 9212856	A	19920617	199303 B
DE 4223288	A1	19930121	DE 4223288	A	19920715	199304
JP 5219487	A	19930827	JP 92190572	A	19920717	199339
US 5327174	A	19940705	US 92914524	A	19920717	199426
GB 2257876	B	19950426	GB 9212856	A	19920617	199520

Priority Applications (No Type Date): KR 91U11361 U 19910719

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2257876	A		26	H04N-007/087	
DE 4223288	A1		4	H04N-005/445	
JP 5219487	A		7	H04N-007/08	
US 5327174	A		7	H04N-007/087	
GB 2257876	B		2	H04N-007/087	

Abstract (Basic): GB 2257876 A

The device comprises a teletext decoder (13), a sync. separator (14), a memory (18) and two counters (155,16). Decoded teletext data is stored in the memory (18). The addressing of the memory is determined by the output of the second counter (16). The output of the first counter (16). The output of the first counter (15) defines a region of the memory and the count of the second counter defines a location within that region. The clock input of the second counter is supplied with pulse signals from the sync. separator which separates the horizontal synchronisation pulses from an input **video** signal.

A key matrix (10) has a full flash key for performing a full flash function in addition to the conventional several kinds of function **key**. If the full flash **key** is activated, microcomputer (11) generates a **decoder control signal** (Sd) for controlling teletext **decoder** and a flash signal (Sf) for controlling memory and the first switch (SW1).

ADVANTAGE - User is able to completely read displayed teletext information. Number of teletext pages simultaneously displayed on single screen.

Dwg. 1/2

Title Terms: DISPLAY; MULTIPLE; TELETEXT; PAGE; DECODE; TELETEXT; SIGNAL; CARRY; INPUT; **VIDEO** ; SIGNAL; SEPARATE; HORIZONTAL; SYNCHRONISATION; PULSE; PRODUCE; PULSE; SIGNAL

Derwent Class: W03

International Patent Class (Main): H04N-005/445; H04N-007/08; H04N-007/087

File Segment: EPI

15/5/86 (Item 47 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009162499 **Image available**

WPI Acc No: 1992-289938/199235

XRPX Acc No: N92-221918

Transmission of scrambled television signal - by sending out control signal including scrambling - key identifier and receiving-station identification codes NoAbstract

Patent Assignee: MATSUSHITA ELEC IND CO LTD (MATU)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 4200125	A	19920721	JP 90333950	A	19901129	199235 B

Priority Applications (No Type Date): JP 90333950 A 19901129

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 4200125 A 6 H04K-001/04

Title Terms: TRANSMISSION; SCRAMBLE; **TELEVISION** ; SIGNAL; SEND; CONTROL;
SIGNAL; SCRAMBLE; KEY; IDENTIFY; RECEIVE; STATION; IDENTIFY; CODE;

NOABSTRACT

Derwent Class: W02

International Patent Class (Main): H04K-001/04

International Patent Class (Additional): H04N-007/167

File Segment: EPI

15/5/87 (Item 48 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007900326 **Image available**

WPI Acc No: 1989-165438/198922

XRFX Acc No: N89-126262

Communication of individual messages in subscription television system
- decoding addressed packet using decoder-specific code and system key,
and teletext packet using system key

Patent Assignee: SCIENTIFIC ATLANTA INC (SCAT)

Inventor: BATES C; LIM S; LUCAS K; RASSEL W V; SMITH N S; YONEDA R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4829569	A	19890509	US 86883301	A	19860708	198922 B

Priority Applications (No Type Date): US 86883301 A 19860708; US 84653061 A
19840921; US 88241939 A 19880908

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 4829569 A 24

Abstract (Basic): US 4829569 A

The composite signal, including **video** and teletext, also comprises addressed packets, which are detected by decoders and which indicate that a message addressed to a particular subscriber is forthcoming, a system control data. The decoder detects an addressed packet addressed to itself, so that it is enabled to select the appropriate teletext message and to display the same. Pref., both address packets and teletext are **encrypted**. The addressed packet is **decrypted** using a **decoder**-specific code and a system **key** transmitted as part of the system **control data**, while the teletext packet is **decrypted** using the system **key**, but cannot be received until the addressed packet has been **decrypted**.

Therefore, redundant levels of security are provided to the system. Messages for display to the user can be selected in response to user initiated commands, in response to decoder initiation, or in response to the transmitter. In each case, the bulk of the data to be displayed is repetitively transmitted by the transmitter and is adapted to the particular user after receipt by supply of user-specific information generated or stored by the decoder. ADVANTAGE - Memory requirements of decoder are minimised, while extensive flexibility in choice of messages to be transmitted is provided.

1/5

Title Terms: COMMUNICATE; INDIVIDUAL; MESSAGE; SUBSCRIBER; **TELEVISION** ;
SYSTEM; DECODE; ADDRESS; PACKET; DECODE; SPECIFIC; CODE; SYSTEM; KEY;
TELETEXT; PACKET; SYSTEM; KEY

Index Terms/Additional Words: PAY; BILL

Derwent Class: W02

International Patent Class (Additional): H04N-007/16

File Segment: EPI

15/5/88 (Item 49 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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007866647

WPI Acc No: 1989-131759/198918

MRPX Acc No: N89-100354

Signal de-scrambling system for communication network terminal - allows option of receiving and de-scrambling un-prepaid programme on impulse-purchase basis within availability of credit

Patent Assignee: CABLE HOME COMMUNICATION CORP (CABL-N); M/A-COM GOVERNMENT SYSTEMS INC (MACO-N); M/A-COM GOVMT SYST (MACO-N); TITAN CORP (TITA-N)

Inventor: BLAKENEY R D; GILHOUSEN K S; HELLER J A; VAN HARDING M;
VANHARDING M

Number of Countries: 011 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 314203	A	19890503	EP 88120288	A	19850603	198918 B
EP 314203	B1	19930526	EP 88120288	A	19850603	199321
DE 3587370	G	19930701	DE 3587370	A	19850603	199327
			EP 88120288	A	19850603	

Priority Applications (No Type Date): EP 88120288 A 19850603

Cited Patents: 1.Jnl.Ref; A3...8934; No-SR.Pub; US 4323921; WO 8301881; WO 8304154

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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EP 314203	A	E 15		
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 314203	B1	E 15	H04N-007/16	
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

DE 3587370	G		H04N-007/16	Based on patent EP 314203
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Abstract (Basic): EP 314203 A

The authorisation processor, receiving programme cost and credit signals (10,11), includes a credit register (12) and a debit register (14) for accumulated charges for scrambled signals accepted by the subscriber for descrambling. The debit is added (15) to the programme cost for comparison (16) with the registered credit.

A programme mask signal (23) unique to each scrambled programme is compared (25) with an authorisation word (24) indicating whether the subscriber may receive the scrambled signal on a prepaid basis. Descrambling is inhibited if any signal is fraudulently altered.

ADVANTAGE - Impulse-purchase descrambling system allows payment to be collected by methods other than post-viewing collection from each individual terminal. Special event transmission on pay-TV channel can be selected by viewers who do not subscribe regularly to all of its programmes.

1/4

Title Terms: SIGNAL; DE; SCRAMBLE; SYSTEM; COMMUNICATE; NETWORK; TERMINAL; ALLOW; OPTION; RECEIVE; DE; SCRAMBLE; PREPAYMENT; PROGRAMME; IMPULSE; PURCHASE; BASIS; AVAILABLE; CREDIT

Index Terms/Additional Words: PAY; PER; VIEW; **TELEVISION**

Derwent Class: W02

International Patent Class (Main): H04N-007/16

International Patent Class (Additional): H04H-001/02; H04P-001/02

File Segment: EPI

15/5/89 (Item 50 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007580467

WPI Acc No: 1988-214399/198831

MRPX Acc No: N88-163520

Service and entertainment system e.g. aircraft passenger TV system - transmits video and audio signals in parallel to remote terminal units located near passenger seats

Patent Assignee: SONY CORP (SONY)
Inventor: KONDO Y; MATSUZAKI A; TAGAWA K; TOYOSHIMA M
Number of Countries: 013 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 277014	A	19880803	EP 88300723	A	19880128	198831 B
JP 63187890	A	19880803	JP 8719981	A	19870130	198837
AU 8810783	A	19880804				198838
BR 8800342	A	19880920				198842
US 4866515	A	19890912	US 88148696	A	19880126	198946
CA 1316253	C	19930413	CA 557440	A	19880127	199320
EP 277014	B1	19950920	EP 88300723	A	19880128	199542
DE 3854480	G	19951026	DE 3854480	A	19880128	199548
			EP 88300723	A	19880128	
ES 2076937	T3	19951116	EP 88300723	A	19880128	199551
KR 9702736	B1	19970308	KR 88816	A	19880130	199935

Priority Applications (No Type Date): JP 8719981 A 19870130

Cited Patents: A3...9126; EP 144770; GB 2102660; GB 2168880; No-SR.Pub; US 4428078; WO 8502743

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 277014	A	E	13		
Designated States (Regional): AT DE ES FR GB IT NL					
US 4866515	A		12		
EP 277014	B1	E	16	H04N-007/18	
Designated States (Regional): AT DE ES FR GB IT NL					
DE 3854480	G			H04N-007/18	Based on patent EP 277014
ES 2076937	T3			H04N-007/18	Based on patent EP 277014
CA 1316253	C			H04N-007/18	
KR 9702736	B1			H04N-007/10	

Abstract (Basic): EP 277014 A

The system transmits a number of **video** , audio signals and **television** game software signals from a central transmitting appts. to each of several terminal units (30), which may be mounted at respective passenger seats. The signals are frequency-multiplexed and transmitted through e.g a leaky cable (21) so that desired signals can be selected at each terminal unit (30).

Each terminal unit (30) includes a selector for at least one of the multiplexed, modulated **video** signals and encoded audio signals. A tuner (33,34) is coupled to the selector for receiving and demodulating the selected **video** signals and encoded audio signals. The selected audio signals are decoded (36) for displaying. The selected **video** signals are displayed (35a) and an audio output terminal (35b) receives the selected decoder audio signals.

USE - Terminals may be located at or near passenger seat in vehicle e.g aircraft, train or bus, or at or near seat in stadium or theatre.

1/4

Title Terms: SERVICE; ENTERTAINMENT; SYSTEM; AIRCRAFT; PASSENGER;

TELEVISION ; SYSTEM; TRANSMIT; **VIDEO** ; AUDIO; SIGNAL; PARALLEL; REMOTE;

TERMINAL; UNIT; LOCATE; PASSENGER; SEAT

Index Terms/Additional Words: **LEAK** ; **FEED**

Derwent Class: W02; W04; W06; X22

International Patent Class (Main): H04N-007/10; H04N-007/18

International Patent Class (Additional): G06F-003/15; G08B-005/36

File Segment: EPI

15/5/91 (Item 52 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004789619

WPI Acc No: 1986-292960/198645

XRPX Acc No: N86-218835

Direct broadcast satellite signal transmission system - using digitised control signals having header containing program related

information

Patent Assignee: GEN INSTR CORP (GENN)
Inventor: GLAAB J B; HORNE D R; JEFFERS J M; MUNDY S W
Number of Countries: 012 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 200310	A	19861105	EP 86301602	A	19860306	198645 B
JP 61253936	A	19861111	JP 8672643	A	19860401	198651
US 4739510	A	19880419	US 8735262	A	19870402	198818
CA 1317368	C	19930504	CA 507979	A	19860430	199323
EP 200310	B1	19930811	EP 86301602	A	19860306	199332
DE 3688855	G	19930916	DE 3688855	A	19860306	199338
			EP 86301602	A	19860306	

Priority Applications (No Type Date): US 85729290 A 19850501
Cited Patents: 2.Jnl.Ref; A3...8740; No-SR.Pub; US 4388645; US 4393404; US 4394687

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 200310	A	E	96		
Designated States (Regional): BE CH DE FR GB IT LI NL SE					
EP 200310	B1	E	39	H04N-007/20	
Designated States (Regional): BE CH DE FR GB IT LI NL SE					
DE 3688855	G			H04N-007/20	Based on patent EP 200310
CA 1317368	C			H04N-007/20	

Abstract (Basic): EP 200310 B

A broadcast signal is generated having active **video** signal portions and horizontal blanking portions. An audio signal portion and a data stream are inserted into the horizontal blanking portions. The data stream has a header portion with program-related information applicable to all receivers, and a number of addressable portions each having information for addressing and controlling particular receivers. The transmission end equipment has a program-processing unit and a real time controller. The processing unit performs **video** signal processing and scrambling, audio digitisation, encryption of the audio data and baseband signal time multiplexing.

The real time controller operates the audio cryptographic **keys**, **encrypts** the addressable **control messages**, generates the message packets in accordance with the transmission protocol, maintains the user data base and communicates with other processing units.

ADVANTAGE - Equipment complexity is shifted to transmitting end of network. (96pp Dwg.No.1/7)

Title Terms: DIRECT; BROADCAST; SATELLITE; SIGNAL; TRANSMISSION; SYSTEM; DIGITAL; CONTROL; SIGNAL; HEADER; CONTAIN; PROGRAM; RELATED; INFORMATION
Derwent Class: W02

International Patent Class (Main): H04N-007/20
International Patent Class (Additional): H04B-007/15; H04H-001/00; H04J-003/00; H04N-007/16
File Segment: EPI

15/5/92 (Item 53 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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004156521

WPI Acc No: 1984-302060/198449

XPX Acc No: N84-225230

Video information line scrambling system - retrieves stored data in sequence different from that in which it was stored, and uses descrambler functioning conversely

Patent Assignee: GEN INSTR CORP (GENN); TITAN CORP (TITA-N); CABLE/HOME COMMUNICATIO (CABL-N); MA-COM LINKABIT (MACO-N)
Inventor: HELLER J A; PAIK W H
Number of Countries: 013 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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EP 127383	A	19841205	EP 84303322	A	19840516	198449	B
AT 8427871	A	19841129				198504	
JP 59228493	A	19841221	JP 84107366	A	19840526	198506	
NO 8402066	A	19841227				198507	
DK 8402552	A	19841128				198513	
US 4563702	A	19860107	US 83498875	A	19830527	198605	
EP 127383	B	19881012				198841	
DE 3474625	G	19881117				198847	
CA 1256554	A	19890627				198934	
DK 174799	B	20031124	DK 842552	A	19840524	200401	

Priority Applications (No Type Date): US 83498875 A 19830527

Cited Patents: US 4245246; WO 8102499

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
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EP 127383	A	E	52				
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Designated States (Regional): BE DE FR GB IT NL SE

EP 127383	B	E					
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Designated States (Regional): BE DE FR GB IT NL SE

DK 174799	B			H04N-007/167	Previous Publ. patent	DK 8402552	
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Abstract (Basic): EP 127383 A

Groups of a predetermined number of the lines are stored in a memory. A retrieval device forms groups of a corresponding number of scrambled lines by retrieving the stored lines in a sequence different from that within the stored group in which the information was held. A portion of a first stored line is retrieved from a position to form a part of a scrambled line and occupying a second position in it. A portion of the first stored line is retrieved from the corresponding second position in it to form a portion of a second scrambled line and occupying a position in it other than the corresponding second position. The portion of the first scrambled line occupying the first position is formed by retrieving a portion of a stored line other than the first stored line from a position other than the corresponding first position.

The process is reversed to **descramble** the lines. The formation of the **scrambled** lines is controlled in response to a **key** stream. Each frame of the **key** stream includes the sets of **control bits**. The first set designates groups of stored lines as sources for corresponding combinations of **scrambled** lines. The second set designates the sequence of formation of the scrambled lines in the formed group.

ADVANTAGE - This system gives more complex scrambled **video** signal line formation.

Title Terms: **VIDEO**; INFORMATION; LINE; SCRAMBLE; SYSTEM; RETRIEVAL; STORAGE; DATA; SEQUENCE; STORAGE; DESCRAMBLER; FUNCTION; CONVERSELY

Index Terms/Additional Words: SUBSCRIBER; TELEVISION

Derwent Class: W02

International Patent Class (Main): H04N-007/167

International Patent Class (Additional): H04K-001/00; H04L-009/00; H04N-007/16

File Segment: EPI

15/5/93 (Item 54 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004027366

WPI Acc No: 1984-172908/198428

XRPX Acc No: N84-128919

Conditional access TV broadcast receiver - has matrix processing unit combining sub-system code and personal identification number which is read from ROM

Patent Assignee: BRITISH BROADCASTING CORP (BRBC)

Inventor: CHAMBERS J P; EDWARDSON S M; WRIGHT D T

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2132860	A	19840711	GB 8333987	A	19831221	198428 B
GB 2132860	B	19870318				198711

Priority Applications (No Type Date): GB 8313295 A 19830513; GB 8236350 A 19821221; GB 8333987 A 19831221

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2132860	A	21		

Abstract (Basic): GB 2132860 A

The receiver includes a descrambler circuit which is enabled by descrambler **control signals** received from a conditional access-sub-system (CASS). The signals are derived from off-air **control data signals** by a **decryption** circuit responsive to a **key**. The **key** is formed in each receiver in a matrix by combining a personal identification number (PIN) with a sub-system code read from a sub-system ROM code is selected by further broadcast data. A crypton device is responsive to the key to identify the cypher used. Alternatively a pre-payment or direct debit accounting system can be used.

0/12

Title Terms: CONDITION; ACCESS; **TELEVISION** ; BROADCAST; RECEIVE; MATRIX; PROCESS; UNIT; COMBINATION; SUB; SYSTEM; CODE; PERSON; IDENTIFY; NUMBER; READ; ROM

Index Terms/Additional Words: SCRAMBLE; SUBSCRIBER; DIRECT; SATELLITE

Derwent Class: W02; W03

International Patent Class (Additional): H04K-001/00; H04N-007/16

File Segment: EPI

15/5/94 (Item 55 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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114514177

WT Acc No: 1984-159719/198426

KRPX Acc No: N84-118780

Digital code reading device, e.g. for coin operated TV - uses fault discriminator for determining change in transmission signal and control signal shaping

Patent Assignee: SONY CORP (SONY)

Inventor: KOBAYASHI H; MATSUNAGA O

Number of Countries: 009 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3346021	A	19840620	DE 3346021	A	19831220	198426 B
FR 2538196	A	19840622				198430
GB 2133953	A	19840801	GB 8333776	A	19831219	198431
JP 59112783	A	19840629	JP 82223211	A	19821220	198432
NL 8304372	A	19840716				198432
AU 8322553	A	19840628				198433
GB 2133953	B	19860625				198626
US 4613900	A	19860923	US 83563163	A	19831219	198641
CA 1220847	A	19870421				198720
KR 9203391	B1	19920430	KR 835935	A	19831214	199348

Priority Applications (No Type Date): JP 82223211 A 19821220

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 3346021	A	28		
KR 9203391	B1		H04N-007/16	

Abstract (Basic): GB 2133953 A

A **television** receiver for unscrambling a broadcast **video** signal scrambled in a predetermined manner by using a digital key code broadcast with the **video** signal and having a predetermined value representative of the manner of scrambling the broadcast **video**

signal, the receiver comprising: a key code reader for reproducing the predetermined value of the digital key code from the **video** signal which may be received by the receiver with an interference signal which changes a

predetermined property of the broadcast signal and causes the levels of the received signal to change according to the change in the predetermined property thereby masking the broadcast key code, said key code reader including means for reading the received **video** signal by comparing levels thereof to the level of a threshold signal, sensing means for determining a change in said predetermined property and generating a control signal in response to said determining of a change, and threshold signal generating means for generating said threshold signal with said level of the threshold signal set in response to said **control signal** so that the **key** code read from the received **video** signal matches the broadcast **key** code; **decoding** means for producing from said reproduced key code a **decoding** signal; and unscrambling means for

unscrambling the received **video** signal using said decoding signal.

DE 3346021 A

Reading device for reproduction (playback) of digital information from a received signal and partic. for correct reading of the digital code in a noise distorted signal, e.g. in coin operated **TV** systems, and now aims at overcoming noise resulting from variations in the signal level (at least two signal levels are used) and masking of the key code forming part of the **video** signal.

Now a fault location circuit is provided for determining any alteration in the relevant property of the transmission signal and for the enabling generation of a control signal. A threshold value signal operator is provided to enable generation of the said threshold value signal of level (V_{th}) with occurrence of the relevant control signal such that the reproduced digital information agrees with the transmission - digital information.

0/8

Title Terms: DIGITAL; CODE; READ; DEVICE; COIN; OPERATE; **TELEVISION** ;
FAULT; DISCRIMINATE; DETERMINE; CHANGE; TRANSMISSION; SIGNAL; CONTROL;
SIGNAL; SHAPE

Derwent Class: W01; W02

International Patent Class (Main): H04N-007/16

International Patent Class (Additional): H03K-005/08; H04K-001/00;

H04L-001/20; H04L-009/00; H04L-025/04

File Segment: EPI

15/5/95 (Item 56 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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003903869

WPI Acc No: 1984-049414/198408

XRPX Acc No: N84-037484

Subscription TV signal encoding-decoding system - prevents unauthorised viewing of programme by using series analog delay elements to receive successive parts of composite video signal

Patent Assignee: MAAST INC (MAAS-N); TELEASE INC (TELE-N)

Inventor: FIELD R W; PERR C D

Number of Countries: 019 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8400656	A	19840216	WO 83US1161	A	19830729	198408 B
AU 8318881	A	19840223				198419
EP 116082	A	19840822	EP 83902719	A	19830729	198434
US 4600942	A	19860715	US 84675452	A	19841127	198631
CA 1253616	A	19890502				198922
EP 116082	B	19910417				199116
DE 3382256	G	19910523				199122

Priority Applications (No Type Date): US 82403107 A 19820729

Cited Patents: EP 18783; EP 21928; EP 21938; GB 2067871; SSR870429; US 2961481; US 2972008; US 4070693; US 4333107; US 4405942

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
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WO 8400656	A	E	47		
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Designated States (National): AU BR DK FI JP MC NO

Designated States (Regional): AT BE CH DE FR GB LU NL SE

EP 116082	A	E			
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Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

EP 116082	B				
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Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Abstract (Basic): WO 8400656 A

The encoder-decoder has an odd number e.g. three, of analog delay elements, each of which delays the signal input by one half of the horizontal line scan period. The three delayed signals are input to a three-throw single-pole switch (54). The selection of which input terminal of the switch is connected to its output terminal is effected by a cycle sequence generator (56) connected with the three control input lines of the switch. By rearranging the **video** signal in an analog format the expense of digital conversion, prior to scrambling, is avoided.

The composite **television** signal supplied to the series of analog delay devices comprises both **video** and timing or synchronising data. The pseudo-random signal which controls the sequencing of the switch is generated independently at the transmitter and receiver, for greater security. A control word and an initialisation word are sent periodically with the **TV** signal to achieve synchronisation, one or both these words being encrypted prior to transmission. (47pp Dwg.No.4/10)

EP 116082 A

A method for enabling only authorised receivers to display a **television** program in an intelligible manner comprising the steps of: generating a **television** program signal (10); generating a pseudo-random signal at an encoding station (24); encrypting said **television** program signal in accordance with said pseudo-random signal (18); producing a control signal related to the generation of said pseudo-random signal (24); transmitting the encrypted **television** program signal and said control signal to a receiver station (20); the method being characterised in that the pseudo-random signal has at least two different states and the **television** program signal is encrypted in accordance with the pseudo-random signal by modifying the program signal in at least one of two modes of encryption operation, the method including the further steps of: providing a decode control key to the receiver station by transmitting said decode control **key** in an encrypted form (16,18,20); providing a master **key** to said receiver station for controlling the **decryption** of the transmitted **decode** control **key**; **decrypting** the decode control **key** (42) and utilising said **decrypted** decode control **key** and said transmitted **control** **signal** to generate a pseudo-random signal at said receiving station (46); **decoding** the **encrypted** **television** program signal in accordance with the pseudo-random signal generated at said receiver station

(38); and applying the decoded program signal to a receiver for display.

L1 ANSWER 1 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 10540251 IFIPAT;IFIUDB;IFICDB
 TI **SCRAMBLING AND DESCRAMBLING A HIGH DEFINITION TV SIGNAL**
 INF Hollar; Mark A., Palo Alto, CA, US
 Holzgrafe; James R., Morgan Hill, CA, US
 Ryan; John O., Woodside, CA, US
 IN Hollar Mark A; Holzgrafe James R; Ryan John O
 PAF Unassigned
 PA Unassigned Or Assigned To Individual (68000)
 AG Norman R. Klivans MORRISON & FOERSTER LLP, 755 Page Mill Road, Palo Alto,
 CA, 94304, US
 PI US 2004047469 A1 20040311
 AI US 2003-356327 20030131
 RLI US 2000-483594 20000114 CONTINUATION 6542609
 PRAI US 1999-115968P 19990115 (Provisional)
 US 1999-117323P 19990125 (Provisional)
 US 1999-131741P 19990430 (Provisional)
 FI US 2004047469 20040311
 US 6542609
 DT Utility; Patent Application - First Publication
 FS ELECTRICAL
 APPLICATION
 CLMN 61
 GI 21 Figure(s).
 FIG. 1 shows a selected sync pulse carrying offset information for HDPK.
 FIG. 2 shows a tri-level pulse used in the high definition video signal of
 FIG. 1.
 FIG. 3 shows a block diagram of an HDPK scrambler.
 FIG. 4A shows a block diagram of an HDPK descrambler; FIG. 4B shows an
 alternate HDPK descrambler.
 FIG. 5 shows an attack on the HDPK **scrambling** by blanking edge
 tracking.
 FIG. 6 shows an example of edge fill using noise fill.
 FIG. 7 shows an example of edge fill using DC edge fill.
 FIG. 8 shows an example of edge fill using mirrored video edge fill.
 FIG. 9 shows a schematic of an embodiment of the HDPK secure video
 interface.
 FIG. 10 shown an implementation of the interface of FIG. 9.
 FIG. 11A shows a standard HDTV set; FIG. 11B shows an HDTV set with the
 stealth interface; FIG. 11C shows a compliant HDTV set without the
 stealth interface.
 FIG. 12A shows a dynamic range HDPK defeat technique; FIG. 12B shows a
 corresponding circuit; FIG. 12C shows the corresponding transfer
 function; FIG. 12D shows a related defeat technique; FIG. 12E shows the
 corresponding circuit.
 FIG. 13A shows a sync peaking HDPK defeat technique; FIG. 13B shows
 corresponding sync pulse waveforms; FIG. 13C shows a corresponding
 circuit.
 FIG. 14 shows an alternative to the FIG. 13A technique.
 FIG. 15A shows a level shift HDPK defeat technique; FIG. 15B shows a
 corresponding circuit.
 FIG. 16A shows an invented sync HDPK defeat technique; technique; FIG. 16B
 shows corresponding sync pulse waveforms; FIG. 16C shows a corresponding
 circuit.
 FIG. 17A shows a wobbled white pulse HDPK defeat technique; FIG. 17B shows
 a corresponding circuit; FIG. 17C shows detail of the FIG. 17B circuit.
 FIG. 18 shows a circuit for an audio carrier HDPK defeat technique.
 FIG. 19 shows a circuit for a digitized VBI data HDPK defeat technique.
 FIG. 20 shows an arrangement to defeat HDPK using a decoder.
 FIG. 21 shows an arrangement to defeat HDPK using time base correction.
 AB Method and apparatus for **scrambling** a high definition
 television signal to discourage unauthorized recording of same. While
 recording per se is not prevented, the resulting recorded signal is

FIG. 1 illustrates a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 2 illustrates the copy management information.

FIG. 3 is a circuit diagram for illustrating a **scrambling** circuit.

FIG. 4 illustrates the structure of an optical disc.

FIG. 5 illustrates the structure of a data sector.

FIG. 6 illustrates the structure of a TOC sector.

FIG. 7 illustrates another embodiment of a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 8 is a waveform diagram showing the state in which a protection code signal has been appended to an analog video signal.

FIG. 9 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into analog video data for copying.

FIG. 10 is a waveform diagram showing the state in which an analog protection code signal has been appended to an analog video signal.

FIG. 11 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into an log video data for analog copying.

FIG. 12 is a waveform diagram showing the state in which an analog protection code signal and a protect code signal have been appended to an analog video signal.

FIG. 13 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are analogically and digitally copied.

FIG. 14 illustrates another illustrative example of the copy management information.

FIG. 15 illustrates a **color burst** inverting operation.

FIG. 16 is a circuit diagram for illustrating another example of the **scrambling** circuit.

FIG. 17 illustrates another example of a sector format.

FIG. 18 illustrates another embodiment of a sector header of the sector format of FIG. 17.

FIG. 19 illustrates an alternative embodiment of the invention featuring replication onto various forms of media, satellite communication and charging implementation.

FIG. 20 illustrates an alternative embodiment of the invention wherein copy protection is implemented according to a user's account status.

AB

A video signal reproduction system for receiving a video signal transmitted via a satellite communication link at a receiving device. A copy permission indicator is inserted in the received video signal. The copy permission indicator is generated on the basis of copy management information that has been appended to the video signal and detected by the system. The indicator is in the form of a multiple of coded bits which are arrayed at a pre-set position in the video signal and are operable to indicate a generation limitation on copying of the video signal.

CLMN

58 20 Figure(s).

FIG. 1 illustrates a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 2 illustrates the copy management information.

FIG. 3 is a circuit diagram for illustrating a **scrambling** circuit.

FIG. 4 illustrates the structure of an optical disc.

FIG. 5 illustrates the structure of a data sector.

FIG. 6 illustrates the structure of a TOC sector.

FIG. 7 illustrates another embodiment of a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 8 is a waveform diagram showing the state in which a protection code signal has been appended to an analog video signal.

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FIG. 15 illustrates a **color burst** inverting operation.

FIG. 16 is a circuit diagram for illustrating another example of the **scrambling** circuit.

FIG. 17 illustrates another example of a sector format.

FIG. 18 illustrates another embodiment of a sector header of the sector format of FIG. 17.

FIG. 19 illustrates an alternative embodiment of the invention featuring replication onto various forms of media, satellite communication and charging implementation.

FIG. 20 illustrates an alternative embodiment of the invention wherein copy protection is implemented according to a user's account status.

L1 ANSWER 4 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 04018404 IFIPAT;IFIUDB;IFICDB
TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL
RECORDING MEDIUM
INF Sako; Yoichiro, Chiba, JP
Yoneyama; Shigeyuki, Tokyo, JP
IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)
PAF Sony Corporation, Tokyo, JP
PA Sony Corp JP (78288)
EXNAM Peeso, Thomas R
AG Frommer Lawrence & Haug LLP
Frommer William S.
Polito Bruno
PI US 6691228 B1 20040210
AI US 2000-479710 20000107
RLI US 1996-690224 19960719 CONTINUATION 6108423
PRAI JP 1995-185724 19950721
JP 1995-185725 19950721
JP 1996-121988 19960516
FI US 6691228 20040210
US 6108423
DT Utility; Granted Patent - Utility, no Pre-Grant Publication
FS ELECTRICAL
GRANTED
CLMN 111
GI 17 Drawing Sheet(s), 18 Figure(s).
FIG. 1 illustrates a step of manufacturing a master disc and a step of reproducing a duplicated disc.
FIG. 2 illustrates the copy management information.
FIG. 3 is a circuit diagram for illustrating a **scrambling** circuit.
FIG. 4 illustrates the structure of an optical disc.
FIG. 5 illustrates the structure of a data sector.

FIG. 6 illustrates the structure of a TOC sector.
 FIG. 7 illustrates another embodiment of a step of manufacturing a master disc and a step of reproducing a duplicated disc.
 FIG. 8 is a waveform diagram showing the state in which a protection code signal has been appended to an analog video signal.
 FIG. 9 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into analog video data for copying.
 FIG. 10 is a waveform diagram showing the state in which an analog protection code signal has been appended to an analog video signal.
 FIG. 11 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into an log video data for analog copying.
 FIG. 12 is a waveform diagram showing the state in which an analog protection code signal and a protect code signal have been appended to an analog video signal.
 FIG. 13 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are analogically and digitally copied.
 FIG. 14 illustrates another illustrative example of the copy management information.
 FIG. 15 illustrates a **color burst** inverting operation.
 FIG. 16 is a circuit diagram for illustrating another example of the **scrambling** circuit.
 FIG. 17 illustrates another example of a sector format.
 FIG. 18 illustrates another embodiment of a sector header of the sector format of FIG. 17.

AB A signal reproducing apparatus for prohibiting copying or unauthorized use. The apparatus includes a copying management information decision circuit 19 for discriminating the state of the copying management information read out from each header of a data sector and within the TOC, a protect signal generating circuit 20 for generating a protect signal based on the discrimination signal and a mixing circuit 24 for mixing a protect signal in a vertical blanking period of an analog video signal D/A converted from digital video data reproduced from an optical disc D. The apparatus also includes a descrambling circuit 31 for descrambling the digital data based on the copying management information and a **scrambling** circuit 32 for descrambling the digital data. The apparatus enables prohibition of unauthorized analog copying and digital copying, inhibition of serial generational copying and prohibition of unauthorized analog and digital copying simultaneously.

CLMN 111

GI 17 Drawing Sheet(s), 18 Figure(s).

FIG. 1 illustrates a step of manufacturing a master disc and a step of reproducing a duplicated disc.
 FIG. 2 illustrates the copy management information.
 FIG. 3 is a circuit diagram for illustrating a **scrambling** circuit.
 FIG. 4 illustrates the structure of an optical disc.
 FIG. 5 illustrates the structure of a data sector.
 FIG. 6 illustrates the structure of a TOC sector.
 FIG. 7 illustrates another embodiment of a step of manufacturing a master disc and a step of reproducing a duplicated disc.
 FIG. 8 is a waveform diagram showing the state in which a protection code signal has been appended to an analog video signal.
 FIG. 9 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into analog video data for copying.
 FIG. 10 is a waveform diagram showing the state in which an analog protection code signal has been appended to an analog video signal.

FIG. 11 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into an log video data for analog copying.

FIG. 12 is a waveform diagram showing the state in which an analog protection code signal and a protect code signal have been appended to an analog video signal.

FIG. 13 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are analogically and digitally copied.

FIG. 14 illustrates another illustrative example of the copy management information.

FIG. 15 illustrates a **color burst** inverting operation.

FIG. 16 is a circuit diagram for illustrating another example of the **scrambling** circuit.

FIG. 17 illustrates another example of a sector format.

FIG. 18 illustrates another embodiment of a sector header of the sector format of FIG. 17.

L1 ANSWER 5 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 03854298 IFIPAT;IFIUDB;IFICDB
TI METHOD AND APPARATUS FOR **SCRAMBLING** A HIGH DEFINITION
TELEVISION SIGNAL

INF Hollar; Mark A., Palo Alto, CA
Holzgrafe; James R., Morgan Hill, CA
Ryan; John O., Woodside, CA

IN Hollar Mark A; Holzgrafe James R; Ryan John O
PAF Macrovision Corporation, Santa Clara, CA, US
PA Macrovision Corp (63766)

EXNAM Smithers, Matthew B

AG Klivans Norman R.
Skjerven Morrill LLP

PI US 6542609 B1 20030401

AI US 2000-483594 20000114

PRAI US 1999-115968P 19990115 (Provisional)

US 1999-117323P 19990125 (Provisional)

US 1999-131741P 19990430 (Provisional)

FI US 6542609 20030401

DT Utility

FS ELECTRICAL

GRANTED

CLMN 25

GI 15 Drawing Sheet(s), 35 Figure(s).

FIG. 1 shows a selected sync pulse carrying offset information for HDPK.

FIG. 2 shows a tri-level pulse used in the high definition video signal of FIG. 1.

FIG. 3 shows a block diagram of an HDPK scrambler.

FIG. 4A shows a block diagram of an HDPK descrambler; FIG. 4B shows an alternate HDPK descrambler.

FIG. 5 shows an attack on the HDPK **scrambling** by blanking edge tracking.

FIG. 6 shows an example of edge fill using noise fill.

FIG. 7 shows an example of edge fill using DC edge fill.

FIG. 8 shows an example of edge fill using mirrored video edge fill.

FIG. 9 shows a schematic of an embodiment of the HDPK secure, video interface.

FIG. 10 shown an implementation of the interface of FIG. 9.

FIG. 11A shows a standard HDTV set; FIG. 11B shows an HDTV set with the stealth interface; FIG. 11C shows a compliant HDTV set without the stealth interface.

FIG. 12A shows a dynamic range HDPK defeat technique; FIG. 12B shows a corresponding circuit; FIG. 12C shows the corresponding transfer function; FIG. 12D shows a related defeat technique; FIG. 12E shows the

corresponding circuit.

FIG. 13A shows a sync peaking HDPK defeat technique; FIG. 13B shows corresponding sync pulse waveforms; FIG. 13C shows a corresponding circuit.

FIG. 14 shows an alternative to the FIG. 13A technique.

FIG. 15A shows a level shift HDPK defeat technique; FIG. 15B shows a corresponding circuit.

FIG. 16A shows an invented sync HDPK defeat technique; technique; FIG. 16B shows corresponding sync pulse waveforms; FIG. 16C shows a corresponding circuit.

FIG. 17A shows a wobbled white pulse HDPK defeat technique; FIG. 17B shows a corresponding circuit; FIG. 17C shows detail of the FIG. 17B circuit.

FIG. 18 shows a circuit for an audio carrier HDPK defeat technique.

FIG. 19 shows a circuit for a digitized VBI data HDPK defeat technique.

FIG. 20 shows an arrangement to defeat HDPK using a decoder.

FIG. 21 shows an arrangement to defeat HDPK using time base correction.

AB Method and apparatus for **scrambling** a high definition television signal to discourage unauthorized recording of same. While recording per se is not prevented, the resulting recorded signal is rendered unusable due to an induced "wobble" between the active video and the associated sync pulses. The scrambled television signal is readily viewable on a compliant high definition television set which descrambles the HDTV signal using an encoded indication of the amount of wobble accompanying the HDTV signal. Also provided is a special interface to prevent unauthorized persons from using the indication of the amount of wobble so as to defeat the **scrambling**. Also provided are method and apparatus for defeating the **scrambling** method and hence allowing recording of the scrambled video signal.

CLMN 25

GI 15 Drawing Sheet(s), 35 Figure(s).

FIG. 1 shows a selected sync pulse carrying offset information for HDPK.

FIG. 2 shows a tri-level pulse used in the high definition video signal of FIG. 1.

FIG. 3 shows a block diagram of an HDPK scrambler.

FIG. 4A shows a block diagram of an HDPK descrambler; FIG. 4B shows an alternate HDPK descrambler.

FIG. 5 shows an attack on the HDPK **scrambling** by blanking edge tracking.

FIG. 6 shows an example of edge fill using noise fill.

FIG. 7 shows an example of edge fill using DC edge fill.

FIG. 8 shows an example of edge fill using mirrored video edge fill.

FIG. 9 shows a schematic of an embodiment of the HDPK secure, video interface.

FIG. 10 shown an implementation of the interface of FIG. 9.

FIG. 11A shows a standard HDTV set; FIG. 11B shows an HDTV set with the stealth interface; FIG. 11C shows a compliant HDTV set without the stealth interface.

FIG. 12A shows a dynamic range HDPK defeat technique; FIG. 12B shows a corresponding circuit; FIG. 12C shows the corresponding transfer function; FIG. 12D shows a related defeat technique; FIG. 12E shows the corresponding circuit.

FIG. 13A shows a sync peaking HDPK defeat technique; FIG. 13B shows corresponding sync pulse waveforms; FIG. 13C shows a corresponding circuit.

FIG. 14 shows an alternative to the FIG. 13A technique.

FIG. 15A shows a level shift HDPK defeat technique; FIG. 15B shows a corresponding circuit.

FIG. 16A shows an invented sync HDPK defeat technique; technique; FIG. 16B shows corresponding sync pulse waveforms; FIG. 16C shows a corresponding circuit.

FIG. 17A shows a wobbled white pulse HDPK defeat technique; FIG. 17B shows a corresponding circuit; FIG. 17C shows detail of the FIG. 17B circuit.

FIG. 18 shows a circuit for an audio carrier HDPK defeat technique.

FIG. 19 shows a circuit for a digitized VBI data HDPK defeat technique.

FIG. 20 shows an arrangement to defeat HDPK using a decoder.

FIG. 21 shows an arrangement to defeat HDPK using time base correction.

L1 ANSWER 6 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 03761949 IFIPAT;IFIUDB;IFICDB
TI METHOD AND APPARATUS FOR ENHANCING THE **SCRAMBLING** OF A TV
SIGNAL VIA ERRONEOUS CLAMP SIGNALS
INF Quan; Ronald, Cupertino, CA
IN Quan Ronald
PAF Macrovision Corporation, Santa Clara, CA
PA Macrovision Corp (63766)
EXNAM Barron, Gilberto
EXNAM Zand, Kambiz
AG Almeida, Georgia
PI US 6459795 B1 20021001
AI US 1999-233922 19990120
XPD 20 Jan 2019
PRAI US 1998-76087P 19980226 (Provisional)
FI US 6459795 20021001
DT Utility
FS ELECTRICAL
GRANTED
MRN 009717 MFN: 0012
CLMN 34
GI 6 Drawing Sheet(s), 16 Figure(s).
AB An improved television **scrambling** signal is achieved by adding
erroneous clamp pulses into a television signal after the signal may have
been previously scrambled, for example, by prior art position modulated
horizontal sync pulses. Prior art **scrambling** systems such as
those using position modulated sync pulses cause tearing in an
unauthorized displayed television picture. The addition of the erroneous
clamp pulses of the present invention causes both tearing and darkening
of the picture. This darkening can completely shut off the display on
some TV sets, thus yielding complete concealment of the television
signal. In an alternative embodiment, an erroneous color "rainbow" effect
is provided by modifying a portion of a **color burst**
signal, to cause the color subcarrier system in a TV set to unlock. In
another embodiment, an improved television vertical **scrambling**
overlay method is achieved by using fewer lines for the insertion of fake
vertical sync pulses in a vertical blanking interval and by turning on
the fewer fake vertical pulses in a selected specific manner. This
improvement provides greater vertical displacement for enhanced picture
concealment while providing additional lines for other purposes.
CLMN 34
GI 6 Drawing Sheet(s), 16 Figure(s).

L1 ANSWER 7 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 03723509 IFIPAT;IFIUDB;IFICDB
TI METHOD AND APPARATUS FOR IMPROVED HORIZONTAL AND VERTICAL OVERLAY SIGNALS
FOR GREATER CONCEALMENT IN MODERN TV SETS
INF Quan; Ronald, Cupertino, CA
IN Quan Ronald
PAF Macrovision Corp., Santa Clara, CA
PA Macrovision Corp (63766)
EXNAM Barron, Gilberto
EXNAM Meislahn, Douglas J
AG Almeida, George
PI US 6424716 B1 20020723
AI US 1998-212336 19981215
XPD 15 Dec 2018
FI US 6424716 20020723
DT Utility
FS ELECTRICAL
GRANTED

MRN 009816 MFN: 0931

CLMN 37

GI 5 Drawing Sheet(s), 18 Figure(s).

AB Video signals are scrambled by position modulating or switching between two types of modified horizontal sync pulses. These modified horizontal pulses are modulated or switched at a rate that causes a non-interlaced tearing pattern when viewed by an unauthorized viewer, whereby greater concealment is achieved by the invention when compared to the prior art. The modified **scrambling** process also is adapted to achieve lower tuner AGC artifacts. With added fake vertical sync signals and strategic use of double or multiple horizontal sync pulses per TV line, modern TV sets using count down circuits are also affected vertically to enhance the concealment effects.

CLMN 37

GI 5 Drawing Sheet(s), 18 Figure(s).

L1 ANSWER 8 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 03573690 IFIPAT;IFIUDB;IFICDB

TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL RECORD MEDIUM

INF Sako; Yoichiro, Chiba, JP
Yoneyama; Shigeyuki, Tokyo, JP

IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)

PAF Sony Corporation, Tokyo, JP

PA Sony Corp JP (78288)

EXNAM Swann, Tod

EXNAM Smithers, Matthew

AG Frommer Lawrence & Haug, LLP.
Frommer, William S.
Polito, Bruno

PI US 6289103 B1 20010911

AI US 2000-479695 20000107

XPD 19 Jul 2016

RLI US 1996-690224 19960719 CONTINUATION 6108423

PRAI JP 1995-185724 19950721

JP 1995-185725 19950721

JP 1996-121988 19960516

FI US 6289103 20010911

US 6108423

DT Utility

FS ELECTRICAL

GRANTED

CLMN 56

GI 17 Drawing Sheet(s), 18 Figure(s).

AB A signal reproducing apparatus for prohibiting copying or unauthorized use. The apparatus includes a copying management information decision circuit 19 for discriminating the state of the copying management information read out from each header of a data sector and within the TOC, a protect signal generating circuit 20 for generating a protect signal based on the discrimination signal and a mixing circuit 24 for mixing a protect signal in a vertical blanking period of an analog video signal D/A converted from digital video data reproduced from an optical disc D. The apparatus also includes a descrambling circuit 31 for descrambling the digital data based on the copying management information and a **scrambling** circuit 32 for descrambling the digital data. The apparatus enables prohibition of unauthorized analog copying and digital copying, inhibition of serial generational copying and prohibition of unauthorized analog and digital copying simultaneously.

CLMN 56

GI 17 Drawing Sheet(s), 18 Figure(s).

L1 ANSWER 9 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 03537515 IFIPAT;IFIUDB;IFICDB

TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL

RECORDING MEDIUM

INF Sako; Yoichiro, Chiba, JP
Yoneyama; Shigeyuki, Tokyo, JP

IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)

PAF Sony Corporation, Tokyo, JP

PA Sony Corp JP (78288)

EXNAM Swann, Tod

EXNAM Smithers, Matthew

AG Frommer, Lawrence & Haug, LLP.
Frommer, William S.
Polito, Bruno

PI US 6256392 B1 20010703 (CITED IN 001 LATER PATENTS)

AI US 2000-480719 20000107

XPD 19 Jul 2016

RLI US 1996-690224 19960719 CONTINUATION 6108423

PRAI JP 1995-185724 19950721
JP 1995-185725 19950721
JP 1996-121988 19960516

FI US 6256392 20010703
US 6108423

DT Utility

FS ELECTRICAL
GRANTED

CLMN 44

GI 17 Drawing Sheet(s), 18 Figure(s).

AB A signal reproducing apparatus for prohibiting copying or unauthorized use. The apparatus includes a copying management information decision circuit 19 for discriminating the state of the copying management information read out from each header of a data sector and within the TOC, a protect signal generating circuit 20 for generating a protect signal based on the discrimination signal and a mixing circuit 24 for mixing a protect signal in a vertical blanking period of an analog video signal D/A converted from digital video data reproduced from an optical disc D. The apparatus also includes a descrambling circuit 31 for descrambling the digital data based on the copying management information and a **scrambling** circuit 32 for descrambling the digital data. The apparatus enables prohibition of unauthorized analog copying and digital copying inhibition of serial generational copying and prohibition of unauthorized analog and digital copying simultaneously.

CLMN 44

GI 17 Drawing Sheet(s), 18 Figure(s).

L1 ANSWER 10 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 03484650 IFIPAT;IFIUDB;IFICDB

TI METHOD AND APPARATUS FOR TELEVISION SIGNAL **SCRAMBLING** USING THE REPLACEMENT OF SYNCHRONIZING AND COLOR SUBCARRIER SIGNALS WITH AN ALTERNATIVE TIME BASE INHERENT IN A QPSK AUDIO SUBCARRIER

INF Griffin; John T., Doylestown, PA

IN Griffin John T

PAF General Instruments Corporation, Horsham, PA

PA General Instrument Corp (33928)

EXNAM Peeso, Thomas R

EXNAM Jack, Todd

AG Kananen, Ronald P.Rader, Fishman & Grauer

PI US 6208737 B1 20010327

AI US 1998-110864 19980707

XPD 7 Jul 2018

FI US 6208737 20010327

DT Utility

FS ELECTRICAL
GRANTED

MRN 009322 MFN: 0689

CLMN 14

GI 4 Drawing Sheet(s), 4 Figure(s).

AB A novel method and apparatus for **scrambling** a television signal includes using a synchronization separator to separate a synchronization signal from an input audio-visual signal. The synchronization signal is then used to regulate an oscillator producing an audio carrier signal. In this manner, the audiovisual signal is transmitted without the component synchronization signal rendering it useless to a conventional television receiver. The descrambler and descrambling method of the invention involve removing the audio carrier signal from the scrambled signal and using the audio carrier signal to generate the color sub-carrier signal and a vertical time frame reference signal necessary to synchronize the transmitted audio visual signal for display.

CLMN 14

GI 4 Drawing Sheet(s), 4 Figure(s).

L1 ANSWER 11 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 03459214 IFIPAT;IFIUDB;IFICDB

TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL RECORD MEDIUM

INF Sako; Yoichiro, Chiba, JP

Yoneyama; Shigeyuki, Tokyo, JP

IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)

PAF Sony Corporation, Tokyo, JP

PA Sony Corp JP (78288)

EXNAM Peeso, Thomas R

AG Frommer Lawrence & Haug, LLP.

Frommer, William S.

Polito, Bruno

PI US 6185687 B1 20010206 (CITED IN 001 LATER PATENTS)

AI US 1999-377571 19990819

XPD 19 Jul 2016

RLI US 1996-690224 19960719 CONTINUATION 6108423

PRAI JP 1995-185724 19950721

JP 1995-185725 19950721

JP 1996-121988 19960516

FI US 6185687 20010206

US 6108423

DT Utility

FS ELECTRICAL

GRANTED

CLMN 48

GI 17 Drawing Sheet(s), 18 Figure(s).

AB A signal reproducing apparatus for prohibiting copying or unauthorized use. The apparatus includes a copying management information decision circuit 19 for discriminating the state of the copying management information read out from each header of a data sector and within the TOC, a protect signal generating circuit 20 for generating a protect signal based on the discrimination signal and a mixing circuit 24 for mixing a protect signal in a vertical blanking period of an analog video signal D/A converted from digital video data reproduced from an optical disc D. The apparatus also includes a descrambling circuit 31 for descrambling the digital data based on the copying management information and a **scrambling** circuit 32 for descrambling the digital data. The apparatus enables prohibition of unauthorized analog copying and digital copying, inhibition of serial generational copying and prohibition of unauthorized analog and digital copying simultaneously.

CLMN 48

GI 17 Drawing Sheet(s), 18 Figure(s).

L1 ANSWER 12 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 03373762 IFIPAT;IFIUDB;IFICDB

TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL RECORD MEDIUM

INF Sako; Yoichiro, Chiba, JP

Yoneyama; Shigeyuki, Tokyo, JP

IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)
 PAF Sony Corporation, Toko, JP
 PA Sony Corp JP (78288)
 EXNAM Gregory, Bernarr E
 AG Frommer Lawrence & Haug, LLP.
 Frommer, William S.
 Polito, Bruno
 PI US 6108423 A 20000822
 AI US 1996-690224 19960719
 XPD 19 Jul 2016
 PRAI JP 1995-185724 19950721
 JP 1995-185725 19950721
 JP 1996-121988 19960516
 FI US 6108423 20000822
 DT Utility
 FS ELECTRICAL
 GRANTED
 MRN 008310 MFN: 0136
 CLMN 52
 GI 17 Drawing Sheet(s), 18 Figure(s).
 AB A signal reproducing apparatus for prohibiting copying or unauthorized use. The apparatus includes a copying management information decision circuit 19 for discriminating the state of the copying management information read out from each header of a data sector and within the TOC, a protect signal generating circuit 20 for generating a protect signal based on the discrimination signal and a mixing circuit 24 for mixing a protect signal in a vertical blanking period of an analog video signal D/A converted from digital video data reproduced from an optical disc D. The apparatus also includes a descrambling circuit 31 for descrambling the digital data based on the copying management information and a **scrambling** circuit 32 for descrambling the digital data. The apparatus enables prohibition of unauthorized analog copying and digital copying, inhibition of serial generational copying and prohibition of unauthorized analog and digital copying simultaneously.
 CLMN 52
 GI 17 Drawing Sheet(s), 18 Figure(s).
 L1 ANSWER 13 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 03262208 IFIPAT;IFIUDB;IFICDB
 TI METHOD AND APPARATUS FOR OPTIMIZING **SCRAMBLING** CONCEALMENT OF A VIDEO SIGNAL BY MODIFYING A SPECIALIZED SYNC PULSE
 INF Kurowski; Kordian, Mt. View, CA
 Quan; Ronald, Cupertino, CA
 IN Kurowski Kordian; Quan Ronald
 PAF Macrovision Corporation, Sunnyvale, CA
 PA Macrovision Corp (63766)
 EXNAM Swann, Tod R
 EXNAM Jack, Todd
 AG Almeida, George
 Brill, Gerow
 PI US 6009172 A 19991228 (CITED IN 001 LATER PATENTS)
 AI US 1997-877061 19970617
 XPD 17 Jun 2017
 FI US 6009172 19991228
 DT Utility
 FS ELECTRICAL
 GRANTED
 MRN 008688 MFN: 0173
 CLMN 47
 GI 6 Drawing Sheet(s), 12 Figure(s).
 AB A technique for improving the **scrambling** concealment of a video signal and the like when displayed on a television set or monitor, includes the pulse width and/or pulse position modulation of a horizontal sync pulse in a horizontal blanking interval by time shifting the leading

edge of the sync pulse while maintaining the trailing edge thereof stationary, by shifting the leading and/or trailing edge of the pulse, or by position modulating a sync pulse of specialized width. In modifications to the pulse width and pulse position modulation overlay techniques, the negative edge of the end of video lines may be modulated in the same way that the leading edge of the sync pulse is modulated, with the two edges locked together or modulated independently. Thus, the amount of position modulation of the horizontal sync pulse or its edge(s) is maximized so that the pertinent circuits of all television sets will always detect, and thus lock onto, the modulated or wobbling pulse width or pulse position modulated sync pulse. The embodiment in which the negative edges of the ends of video lines are modulated along with the sync pulses, insures that all television sets will lock onto a wobbling edge. This insures the concealment of the video signal, or equivalent signal, in all possible situations and for all types of television sets or monitors. An associated technique also is disclosed for descrambling the scrambled video signal when authorized.

CLMN 47

GI 6 Drawing Sheet(s), 12 Figure(s).

L1 ANSWER 14 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02997022 IFIPAT;IFIUDB;IFICDB

TI VIDEO SIGNAL **SCRAMBLING** APPARATUS

INF Chang, Dong Hyun, Suwon, KR

IN Chang Dong Hyun (KR)

PAF Samsung Electro-Mechanics Co., Ltd., Suwon, KR

PA Samsung Electro-Mechanics Co Ltd KR (31085)

EXNAM Barron, Jr, Gilberto

AG Ladas & Parry

PI US 5768376 A 19980616

AI US 1996-692728 19960806

XPD 6 Aug 2016

PRAI KR 1995-36994 19951025

FI US 5768376 19980616

DT Utility

FS ELECTRICAL

GRANTED

MRN 008135 MFN: 0605

CLMN 7

GI 9 Drawing Sheet(s), 27 Figure(s).

AB A video signal **scrambling** apparatus which scrambles a video signal in a cable or commercial broadcasting system to prevent nonsubscribers from viewing the signal and the unwarranted descrambling of the signal. The **scrambling** apparatus scrambles the video signal in such a manner that a predetermined period of a sync signal is selectively inverted and attenuated, and then an artificial sync signal is inserted into the video signal in which the sync signal is inverted and attenuated, causing the horizontal sync period to be irregular.

CLMN 7

GI 9 Drawing Sheet(s), 27 Figure(s).

L1 ANSWER 15 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02817054 IFIPAT;IFIUDB;IFICDB

TI METHOD AND APPARATUS FOR TELEVISION SIGNAL **SCRAMBLING** USING A LINE EXPANSION TECHNIQUE

INF Griffin, John T, Doylestown, PA

Grubb, III, David, Doylestown, PA

Hamilton, Jeffrey S, Doylestown, PA

IN Griffin John T; Grubb David III; Hamilton Jeffrey S

PAF General Instrument Corporation, Jerrold Communications Division, Hatboro, PA

PA General Instrument Corp (33928)

EXNAM Gregory, Bernarr E

AG Marshall, O'Toole, Gerstein, Murray & Borun

PI US 5606612 A 19970225 (CITED IN 006 LATER PATENTS)
AI US 1994-279514 19940725
XPD 25 Jul 2014
FI US 5606612 19970225
DT Utility; REASSIGNED
FS ELECTRICAL
GRANTED

MRN 007186 MFN: 0347
CLMN 37

GI 7 Drawing Sheet(s), 11 Figure(s).

AB A method and apparatus for **scrambling** an original analog video signal samples predetermined portions of the original video signal at a first rate and stores the sampled portions of the original video signal within a memory device. The stored video signal is read out of the memory device at a second rate, which is less than the first rate, to produce a time expanded scrambled video signal. A predetermined code is inserted into the time expanded scrambled video signal which is then converted into an analog scrambled video signal and transmitted through a channel. A method and apparatus for descrambling the scrambled video signal to produce a reconstructed video signal samples the scrambled video signal at the second rate, stores the sampled scrambled video signal into a memory and reads the sampled scrambled video signal out of the memory at the first rate. Replicas of the eliminated portions of the original video signal are reinserted into the sampled video signal to produce a digital version of the original video signal which is then converted to analog to produce the reconstructed video signal. The code word within the scrambled video signal is used to align each frame of the reconstructed video signal with the frame of the incoming scrambled video signal to keep the reconstructed video signal synchronized with the scrambled video signal.

CLMN 37

GI 7 Drawing Sheet(s), 11 Figure(s).

L1 ANSWER 16 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02635160 IFIPAT;IFIUDB;IFICDB

TI **SCRAMBLING METHOD**

INF Fisher, Delmer D, Milpitas, CA
Snell, Stephen C, Aptos, CA

IN Fisher Delmer D; Snell Stephen C

PAF ICTV, Inc, Los Gatos, CA

PA ICTV Inc

EXNAM Swann, Tod R

AG Bromberg & Sunstein

PI US 5442700 A 19950815 (CITED IN 029 LATER PATENTS)

AI US 1994-310719 19940922

XPD 15 Aug 2012

RLI US 1990-589205 19900928 CONTINUATION-IN-PART 5093718

US 1991-754932 19910910 CONTINUATION-IN-PART 5220420

US 1992-877325 19920501 CONTINUATION-IN-PART 5412720

US 1993-56958 19930503 DIVISION 5526034

FI US 5442700 19950815

US 5093718

US 5220420

US 5412720

US 5526034

DT Utility; REASSIGNED

FS ELECTRICAL

GRANTED

CLMN 4

GI 41 Drawing Sheet(s), 41 Figure(s).

AB A system for **scrambling** a television signal by designating a horizontal line number on a pseudorandom basis and then stripping the vertical and horizontal synch components from the signal at each location of a frame except at the designated line.

CLMN 4

GI 41 Drawing Sheet(s), 41 Figure(s).

L1 ANSWER 17 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 02524244 IFIPAT;IFIUDB;IFICDB
TI TELEVISION SIGNAL ENHANCEMENT AND **SCRAMBLING** SYSTEM
INF Zelenz, Martin L, DeWitt, NY
IN Zelenz Martin L
PAF Tresness, Andrew F, Syracuse, NY
PA Tresness Andrew F
EXNAM Buczinski, Stephen C
AG Trapani, Lawrence P
PI US 34720 E1 19940906
US 5022078 E1 19910604 ORIGINAL PATENT
AI US 1993-61924 19930514
US 1990-490788 19900308 ORIGINAL APPLICATION
FI US 34720 19940906
US 5022078 19910604
DT Reissue; CERTIFICATE OF CORRECTION
CDAT 21 Mar 1995
FS ELECTRICAL
GRANTED

CLMN 46

GI 2 Drawing Sheet(s), 5 Figure(s).

AB A television signal is distorted by passing it through a distortion amplifier which applies a Gaussian distortion curve to the signal. The curve has a maximum increase in amplitude of about 38 dB, which is about 30 dB with respect to the amplitude increase of the video carrier. The signal is further modified by the addition of gated jamming signals between the video and audio carriers. The jamming signals are present only during the horizontal and vertical blanking intervals and so do not affect the quality of the picture reproduced by the receiver. The distorted television signal is restored by applying a filter function which is the inverse of the distortion function. The gated jamming signals are removed by the restoring filter to a degree which permits the television receiver to read the horizontal and vertical sync signals and the **color burst** signal during the blanking intervals.

CLMN 46

GI 2 Drawing Sheet(s), 5 Figure(s).

L1 ANSWER 18 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 02361982 IFIPAT;IFIUDB;IFICDB
TI BURST PHASE CORRECTION SYSTEM FOR VIDEO DESCRAMBLING
INF Griesshaber, K Heinz, Los Gatos, CA
IN Griesshaber K Heinz
PAF Macrovision Corp, Mountain View, CA
PA Macrovision Corp (63766)
EXNAM Cangialosi, Salvatore
AG Skjerven, Morrill, MacPherson, Franklin & Friel
PI US 5212723 A 19930518 (CITED IN 006 LATER PATENTS)
AI US 1991-743049 19910808
XPD 8 Aug 2011
FI US 5212723 19930518
DT Utility
FS ELECTRICAL
GRANTED

MRN 005813 MFN: 0206

CLMN 15

GI 65 Drawing Sheet(s), 65 Figure(s).

AB A method and apparatus for synchronizing a randomized video signal to a phase-locked sampling system. The phase-locked system is part of a **scrambling** apparatus capable of **scrambling** and subsequent descrambling of video signals recorded on videotape recorders which undesirably introduce time-base errors into the

luminance/chrominance phase relationship. These time-base errors are removed without use of a time-base corrector by programmable delay line memory circuitry which introduces a programmable amount of delay into the video path. The delay line includes a programmable length FIFO memory module.

CLMN 15

GI 65 Drawing Sheet(s), 65 Figure(s).

L1 ANSWER 19 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02355574 IFIPAT;IFIUDB;IFICDB

TI TELEVISION SIGNAL **SCRAMBLING** METHOD AND APPARATUS

INF Hashimoto, Takashi, Tokyo, JP

IN Hashimoto Takashi (JP)

PAF Pioneer Electronic Corporation, Tokyo, JP

PA Pioneer Corp JP (66034)

EXNAM Buczinski, Stephen C

AG Sughrue, Mion, Zinn, Macpeak & Seas

PI US 5206907 A 19930427 (CITED IN 003 LATER PATENTS)

AI US 1991-693879 19910430

XPD 30 Apr 2011

PRAI JP 1990-118697 19900510

FI US 5206907 19930427

DT Utility; EXPIRED

FS ELECTRICAL

GRANTED

MRN 005701 MFN: 0259

CLMN 17

GI 15 Drawing Sheet(s), 50 Figure(s).

AB A video signal from a video-audio source is converted to a digital signal, and stored in a memory. A read clock or a write clock for the memory is temporarily suspended to elongate or shorten a corresponding part of the digital signal. The elongated/shortened digital signal is converted to an analog video signal; and finally sync/blanking signal portions are compressed by a predetermined amount. The elongating operation may be continued and a one horizontal period part of the digital signal may be deleted when an accumulated elongation time has reached or exceeded one horizontal period.

CLMN 17

GI 15 Drawing Sheet(s), 50 Figure(s).

L1 ANSWER 20 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02305270 IFIPAT;IFIUDB;IFICDB

TI **SCRAMBLING** VIDEO BY HORIZONTAL AND VERTICAL TIME SHIFTING

INF Pires, H George, 47H Valley Rd, Hampton, NJ, 08827

IN Pires H George

PAF Unassigned

PA Unassigned Or Assigned To Individual (68000)

EXNAM Cangialosi, Salvatore

AG Rohm & Monsanto

PI US 5161188 A 19921103 (CITED IN 006 LATER PATENTS)

AI US 1991-732593 19910719

XPD 19 Jul 2011

FI US 5161188 19921103

DT Utility; EXPIRED

FS ELECTRICAL

GRANTED

CLMN 14

GI 7 Drawing Sheet(s), 21 Figure(s).

AB A system for **scrambling** and descrambling the image associated with a video signal employs the shifting in time of a video image after removal of vertical and horizontal synchronization, and **color burst** reference signals. Coded data which contains information necessary for unscrambling the video image is transmitted in the video signal itself during the vertical blanking interval. A high level of

simplification in the decoding is achieved by merely restoring synchronization and color reference data without the need for returning the video image to its original timing. This system provides the significant advantage of permitting unscrambling by unlocking vertical and horizontal synchronization of the video image using inexpensive circuitry at the decoder end, while affording the operator of the transmitter the ability to select whether the unscrambled signal is recordable by a conventional video tape recorder at the receiving end.

CLMN 14

GI 7 Drawing Sheet(s), 21 Figure(s).

L1 ANSWER 21 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02289038 IFIPAT;IFIUDB;IFICDB

TI METHOD AND APPARATUS FOR ENHANCING THE SECURITY OF A SCRAMBLED TELEVISION SIGNAL

INF Radice, Anthony M, Riverside, NJ

Robbins, Clyde, Maple Glen, PA

Westerfer, Richard, Blue Bell, PA

IN Radice Anthony M; Robbins Clyde; Westerfer Richard

PAF General Instrument Corporation, Hatboro, PA

PA General Instrument Corp (33928)

EXNAM Cangialosi, Salvatore

AG Lipsitz, Barry R

PI US 5146496 A 19920908 (CITED IN 003 LATER PATENTS)

AI US 1991-714673 19910613

XPD 13 Jun 2011

FI US 5146496 19920908

DT Utility; REASSIGNED

FS ELECTRICAL

GRANTED

MRN 005757 MFN: 0628

CLMN 20

GI 1 Drawing Sheet(s), 2 Figure(s).

AB The **scrambling** security of a sync suppressed television signal is enhanced by eliminating the fixed time relationship between the normal **color burst** component and synchronization information in successive lines of the television signal. Transmission of a first plurality of television lines is delayed to achieve a cumulative delay corresponding at least to the duration of a **color burst** component of the television signal. The transmission of a second plurality of television lines is subsequently accelerated to reduce the cumulative delay. By repeating the delaying and accelerating steps, the location of the **color burst** component is varied within the television signal over time. Derivation of a substitute horizontal synchronization pulse from the **color burst** component is thereby prevented.

CLMN 20

GI 1 Drawing Sheet(s), 2 Figure(s).

L1 ANSWER 22 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02194091 IFIPAT;IFIUDB;IFICDB

TI VIDEO **SCRAMBLING**, AUDIO MASKING AND DATA TRANSMISSION METHODS FOR WIRELESS CABLE SYSTEMS

INF Bevins, Jr, George L, 3524 Godwin Blvd, Suffolk, VA, 23434

Griffin, Patrick G, 2424 Locks Landing, Chesapeake, VA, 23323

Hayes, John J, 1013 Kincaid Ter, Chesapeake, VA, 23320

Kendall, Phillip K, 710 Summers Pl, Portsmouth, VA, 23702

IN Bevins George L Jr; Griffin Patrick G; Hayes John J; Kendall Phillip K

PAF Unassigned

PA Unassigned Or Assigned To Individual (68000)

EXNAM Gregory, Bernarr E

PI US 5060262 A 19911022 (CITED IN 023 LATER PATENTS)

AI US 1990-519856 19900507

XPD 7 May 2010

FI US 5060262 19911022
DT Utility; REASSIGNED; EXPIRED; REINSTATED
FS ELECTRICAL
GRANTED

MRN 005298 MFN: 0923

CLMN 40

GI 15 Drawing Sheet(s), 30 Figure(s).

AB Video **scrambling** is accomplished by attenuating the video carrier during the horizontal blanking interval and/or by omitting horizontal sync pulses, vertical serration pulses and equalizing pulses. The method of **scrambling** can be dynamically changed, but this is done only at the change of scenes. Audio masking and data transmission is accomplished via phase modulation of the video carrier. At the receiver, timing signals for unscrambling video and unmasking audio are obtained from the transmitted data. The system addresses problems that exist in wireless cable systems, but are not present in cabled systems.

CLMN 40

GI 15 Drawing Sheet(s), 30 Figure(s).

L1 ANSWER 23 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02159936 IFIPAT;IFIUDB;IFICDB

TI CATV TERMINAL UNIT HAVING AN IMPROVED DESCRAMBLING OPERATION

INF Hashimoto, Takashi, Tokyo, JP

IN Hashimoto Takashi (JP)

PAF Pioneer Electronic Corporation, Tokyo, JP

PA Pioneer Corp JP (66034)

EXNAM Tarcza, Thomas H

EXNAM Swann, Tod

AG Sughrue, Mion, Zinn, Macpeak & Seas

PI US 5029340 A 19910702 (CITED IN 003 LATER PATENTS)

AI US 1990-498051 19900323

XPD 23 Mar 2010

PRAI JP 1989-131399 19890526

FI US 5029340 19910702

DT Utility; EXPIRED

FS ELECTRICAL

GRANTED

MRN 005260 MFN: 0652

CLMN 8

GI 5 Drawing Sheet(s), 19 Figure(s).

AB A CATV terminal unit descrambling operation is disclosed wherein unrecovered video pulse portions, existing because a **scrambling** compression period is longer than a descrambling expansion period, are eliminated. The unrecovered pulse portions are eliminated by substituting a signal having a level equal to or near a pedestal level of the video signal during time intervals when an unrecovered pulse portion is expected. The elimination of the unrecovered pulse portions removes the undesirable effects of luminance changes and turnover noises.

CLMN 8

GI 5 Drawing Sheet(s), 19 Figure(s).

L1 ANSWER 24 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02152042 IFIPAT;IFIUDB;IFICDB

TI TELEVISION SIGNAL ENHANCEMENT AND **SCRAMBLING** SYSTEM

INF Zelenz, Martin L, DeWitt, NY

IN Zelenz Martin L

PAF Tresness, Andrew F, Syracuse, NY

PA Tresness Andrew F

EXNAM Buczinski, Stephen C

AG Berman, Aisenberg & Platt

PI US 5022078 A 19910604 (CITED IN 005 LATER PATENTS)

AI US 1990-490788 19900308

XPD 8 Mar 2010

FI US 5022078 19910604

DT Utility; REISSUE REQUESTED
FS ELECTRICAL
GRANTED

MRN 005277 MFN: 0247

CLMN 12

GI 2 Drawing Sheet(s), 5 Figure(s).

AB A television signal is distorted by passing it through a distortion amplifier which applies a Gaussian distortion curve to the signal. The curve has a maximum increase in amplitude of about 38 dB, which is about 30 dB with respect to the amplitude increase of the video carrier. The signal is further modified by the addition of gated jamming signals between the video and audio carriers. The jamming signals are present only during the horizontal and vertical blanking intervals and so do not affect the quality of the picture reproduced by the receiver. The distorted television signal is restored by applying a filter function which is the inverse of the distortion function. The gated jamming signals are removed by the restoring filter to a degree which permits the television receiver to read the horizontal and vertical sync signals and the **color burst** signal during the blanking intervals.

CLMN 12

GI 2 Drawing Sheet(s), 5 Figure(s).

L1 ANSWER 25 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02131933 IFIPAT;IFIUDB;IFICDB

TI **SCRAMBLING** VIDEO BY TIME SHIFTING

INF Pires, H George, 47H Valley Rd, Hampton, NJ, 08827

IN Pires H George

PAF Unassigned

PA Unassigned Or Assigned To Individual (68000)

EXNAM Tarcza, Thomas H

EXNAM Cain, David

AG Rohm & Monsanto

PI US 5003592 A 19910326 (CITED IN 006 LATER PATENTS)

AI US 1990-504943 19900405

XPD 5 Apr 2010

FI US 5003592 19910326

DT Utility; EXPIRED

FS ELECTRICAL

GRANTED

CLMN 20

GI 5 Drawing Sheet(s), 17 Figure(s).

AB A system for **scrambling** and descrambling the image associated with a video signal employs the shifting in time of a video image after removal of synchronization and **color burst** reference signals. Coded data which contains information necessary for unscrambling the video image is transmitted in the video signal itself during the vertical blanking interval. A high level of simplification in the decoding is achieved by merely restoring synchronization and color reference data without the need for returning the video image to its original timing. This system provides the significant advantage of permitting unscrambling of the video image using inexpensive circuitry at the decoder end, while affording the operator of the transmitter to select whether the unscrambled signal is recordable using a conventional video tape recorder.

CLMN 20

GI 5 Drawing Sheet(s), 17 Figure(s).

L1 ANSWER 26 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 02087888 IFIPAT;IFIUDB;IFICDB

TI SECURE TELEVISION SIGNAL ENCODING AND DECODING SYSTEM

INF McAdam, Peter L, Los Angeles, CA

Schnerk, Thomas G, Rancho Palos Verdes, CA

Shreve, Gregory A, Redondo Beach, CA

IN McAdam Peter L; Schnerk Thomas G; Shreve Gregory A

PAF TRW Inc, Redondo Beach, CA
 PA TRW Inc (85976)
 EXNAM Tarcza, Thomas H
 EXNAM Wallace, Linda J
 AG Goldstein, Sol L
 PI US 4964162 A 19901016 (CITED IN 006 LATER PATENTS)
 AI US 1986-933668 19861121
 DCD 8 Dec 2004
 XPD 16 Oct 2007
 RLI US 1985-773488 19850909 CONTINUATION-IN-PART 4951314
 US 1986-829268 19860214 CONTINUATION-IN-PART ABANDONED
 US 1986-831941 19860224 CONTINUATION-IN-PART 4827510
 US 1986-878735 19860326 CONTINUATION-IN-PART 4712240
 FI US 4964162 19901016
 US 4951314
 US 4827510
 US 4712240
 DT Utility
 FS ELECTRICAL
 GRANTED
 MRN 004644 MFN: 0759
 004663 0897
 CLMN 88
 GI 9 Drawing Sheet(s), 28 Figure(s).
 AB A television signal encoding and decoding system providing a line-spin scrambled video signal with substantially reduced amplitude gaps and line tilt and a digitally-encrypted audio signal that can be transmitted within the bandwidth limitations of a conventional NTSC television signal. The television signal encoding system, located at a television transmitter, includes a video and an audio encoder. The video encoder selectively line spin scrambles, reverses and inverts certain video lines or video line segments to generate a line-spin scrambled video signal having amplitude gaps less than some desired value. The audio encoder digitally encrypts the audio signal and modulates the encrypted audio signal with a three-level partial response waveform to generate and encrypted audio signal that can be transmitted within the bandwidth limitations of a conventional NTSC television signal. The television signal decoding system, located at a television receiver, includes a video and an audio decoder. The video decoder applies line tilt compensation to the received line-spin scrambled video signal and then unscrambles the compensated scrambled video signal. The audio decoder demodulates and decrypts the received audio signal.
 CLMN 88
 GI 9 Drawing Sheet(s), 28 Figure(s).
 L1 ANSWER 27 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 02075678 IFIPAT;IFIUDB;IFICDB
 TI CATV SYSTEM TRANSMITTING A SCRAMBLED TELEVISION SIGNAL
 INF Ideno, Akira, Tokyo, JP
 IN Ideno Akira (JP)
 PAF Pioneer Electronic Corporation, Tokyo, JP
 PA Pioneer Corp JP (66034)
 EXNAM Tarcza, Thomas H
 EXNAM Cain, David
 AG Sughrue, Mion, Zinn, Macpeak & Seas
 PI US 4953208 A 19900828 (CITED IN 011 LATER PATENTS)
 AI US 1989-448442 19891211
 XPD 11 Dec 2009
 PRAI JP 1989-107875 19890428
 FI US 4953208 19900828
 DT Utility; EXPIRED
 FS ELECTRICAL
 GRANTED
 MRN 005193 MFN: 0370

CLMN 8

GI 12 Drawing Sheet(s), 13 Figure(s).

AB A method of **scrambling** a television signal is provided in which, during a horizontal blanking interval and during a vertical blanking interval, a video signal is compressed and a key signal containing information concerning the compression is superimposed on an audio signal in the horizontal blanking period. The method is characterized by superimposing a pseudo-key signal on an audio signal in the vertical blanking interval, making the key signal contain information concerning the position of a vertical blanking interval, and fixing a video signal in a predetermined number of horizontal scanning periods before a vertical synchronizing signal portion in the vertical blanking interval at a constant level while eliminating color bursts in a predetermined number of horizontal scanning periods before and after the vertical synchronizing signal portion in the vertical blanking interval. In this way, unauthorized users are prohibited from receiving the signal, and unauthorized access is made difficult.

CLMN 8

GI 12 Drawing Sheet(s), 13 Figure(s).

L1 ANSWER 28 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 01793976 IFIPAT;IFIUDB;IFICDB

TI **SCRAMBLING** SYSTEMS FOR CATV

INF Farmer, James O, Doraville, GA

IN FARMER JAMES O

PAF Scientific Atlanta, Inc, Atlanta, GA

PA SCIENTIFIC-ATLANTA INC (75043)

EXNAM Buczinski, Stephen C

EXNAM Koltak, Melissa L

AG LuKacher, Martin

PI US 4691353 A 19870901 (CITED IN 004 LATER PATENTS)

AI US 1985-704817 19850225

XPD 25 Feb 2005

FI US 4691353 19870901

DT Utility

FS ELECTRICAL

GRANTED

MRN 004381 MFN: 0831

CLMN 13

GI 2 Drawing Sheet(s), 5 Figure(s).

AB In a TV signal **scrambling** system for use in a CATV network wherein premium programs are transmitted over cable, by broadcast transmission and the like with the sync pulses of the color TV signals suppressed, a processor is provided which processes the color components separately from the luminance and sync components so as to remove coherency (constant phase relationship) between the color subcarrier and the sync pulses. The separately processed components with the coherency removed are recombined to provide the composite TV signal which is scrambled and transmitted to the subscribers. Subscribers having television receivers of the type which recover sync signals by count down techniques from the color subcarrier, such as those using some integrated circuits (chip sets) are then made unable to recover the sync pulses unless equipped with an authorized descrambler. Unauthorized subscribers who are equipped with digital television receivers therefore obtain a scrambled TV picture which rolls horizontally across the screen.

CLMN 13

GI 2 Drawing Sheet(s), 5 Figure(s).

L1 ANSWER 29 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 01775183 IFIPAT;IFIUDB;IFICDB

TI TELEVISION SIGNAL **SCRAMBLING** APPARATUS

INF Inaba, Masao, Tokyo, JP

Kashigi, Kazuo, Tokyo, JP

IN INABA MASAO (JP); KASHIGI KAZUO (JP)

PAF NEC Corporation, JP
 PA NEC CORP JP (59832)
 EXNAM Buczinski, Stephen C
 EXNAM Koltak, Melissa T
 AG Ostrolenk, Faber, Gerb & Soffen
 PI US 4673975 A 19870616 (CITED IN 008 LATER PATENTS)
 AI US 1984-669820 19841108
 XPD 8 Nov 2004
 PRAI JP 1983-210349 19831109
 FI US 4673975 19870616
 DT Utility
 FS ELECTRICAL
 GRANTED
 MRN 004334 MFN: 0091
 CLMN 11
 GI 5 Drawing Sheet(s), 8 Figure(s).
 AB A **scrambling** apparatus which scrambles a television signal prior to its transmission to prevent interception of the signal by means other than a counterpart descrambler apparatus. The television signal is scrambled by dividing each scan line (a scan line includes its leading sync portion) into first and second portions which are divided by an intermediate picture element. Each line is transmitted as follows: first the intermediate picture element is transmitted followed by the second scan line portion, followed by the first portion which begins with the sync signal and is terminated by retransmission of the intermediate picture element. The position of the intermediate picture element is randomly changed in each successive scan line so that reconstruction of the original television signal becomes exceedingly difficult. In the descrambler (receiver), a random address generator which includes a read only memory which contains the sequence of the position of the intermediate picture element in successive scan lines is used for receiving the scrambled television signal and descrambling the signal and restoring it to its original form for use in standard television receivers.
 CLMN 11
 GI 5 Drawing Sheet(s), 8 Figure(s).
 L1 ANSWER 30 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 01764102 IFIPAT;IFIUDB;IFICDB
 TI VIDEO SIGNAL **SCRAMBLING** SYSTEM EMPLOYING FULL LINE REVERSAL AND DOUBLE BURST CODING
 INF Blatter, Harold, Indianapolis, IN
 IN BLATTER HAROLD
 PAF RCA Corporation, Princeton, NJ
 PA RCA CORP (69881)
 EXNAM Buczinski, Stephen C
 AG Coalter, R G
 Emanuel, P M
 Rasmussen, P J
 PI US 4663659 A 19870505 (CITED IN 014 LATER PATENTS)
 AI US 1985-793185 19851031
 XPD 31 Oct 2005
 FI US 4663659 19870505
 DT Utility
 FS ELECTRICAL
 GRANTED
 MRN 004549 MFN: 0029
 CLMN 16
 GI 10 Drawing Sheet(s), 13 Figure(s).
 AB A memory reverses the sequence of samples of selected lines of a composite video input signal without separating the **color burst** and chrominance components of the lines thereby preserving chroma-burst phase integrity of scrambled lines. A burst inserter adds a second **color burst** component to the normal and

reversed sequence lines to preserve the secrecy of the scramble code. A descrambler includes a memory for restoring the sample sequence and removing the extra **color burst** component.

CLMN 16

GI 10 Drawing Sheet(s), 13 Figure(s).

L1 ANSWER 31 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 01694125 IFIPAT;IFIUDB;IFICDB

TI DIGITAL AUDIO **SCRAMBLING** SYSTEM WITH ERROR CONDITIONING

INF Heller, Jerrold A, San Diego, CA

Paik, Woo H, San Diego, CA

Walker, Gordon K, Boxborough, MA

IN HELLER JERROLD A; PAIK WOO H; WALKER GORDON K

PAF M/A-COM Linkabit, Inc, San Diego, CA

PA M A COM LINKABIT INC

EXNAM Cangialosi, Salvatore

EXNAM Lewis, Aaron J

AG Callan, Edward W

PI US 4608456 A 19860826 (CITED IN 030 LATER PATENTS)

AI US 1983-498824 19830527

XPD 26 Aug 2003

FI US 4608456 19860826

DT Utility; REASSIGNED

FS ELECTRICAL

GRANTED

MRN 004205 MFN: 0068

004555 0903

CLMN 24

GI 5 Drawing Sheet(s), 9 Figure(s).

AB In the **scrambling** system, an analog audio signal is converted into a digital signal to provide a sequence of digital signal samples corresponding to the analog audio signal. Each digital signal sample is compressed to provide compressed signal samples having a sign bit, three exponent bits and seven mantissa bits. Each bit of each compressed signal sample is exclusive-OR'd with a unique keystream to thereby scramble the audio signal. A Hamming code generator generates code bits for correcting singular errors in a combination of the sign bit, the exponent bits and the code bits; and a parity bit generator generates a parity bit for detecting double errors in a combination of the sign bit, the exponent bits and the code bits and for further detecting an error in the most significant mantissa bit and/or the parity bit. The bits from a plurality of successive compressed, error-encoded signal samples are interleaved and serialized in order to separate the bits from any single sample by at least a predetermined duration associated with an FM discriminator click. The serialized, interleaved, error-encoded, compressed signal samples are combined to provide two-bit digital words. The digital words are converted to digital PAM data signals which when converted to an analog signal by digital-toanalog conversion, provide a pulse-amplitude-modulated signal having a level related to the binary value of the digital words. The digital PAM data signals are converted to an analog signal to provide the pulse-amplitude-modulated signal. The descrambler system descrambles the scrambled audio signal by a process that is the converse of the **scrambling** process. Singular errors in a scrambled signal sample are detected and corrected by a Hamming error corrector. Double errors in a scrambled signal sample are detected by a parity bit check and compensated for by repeating the last received error free signal sample.

CLMN 24

GI 5 Drawing Sheet(s), 9 Figure(s).

L1 ANSWER 32 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN

AN 01691380 IFIPAT;IFIUDB;IFICDB

TI VIDEO TRANSMISSION SYSTEM USING TIME-WARP **SCRAMBLING**

INF Frederiksen, Jeffrey E, 603 W Haven Dr, Arlington Heights, IL, 60005

IN FREDERIKSEN JEFFREY E
 PAF Unassigned
 PA UNASSIGNED OR ASSIGNED TO INDIVIDUAL (68000)
 EXNAM Buczinski, S C
 EXNAM Koltak, Melissa
 AG Leydig, Voit & Mayer, Ltd
 PI US 4605961 A 19860812 (CITED IN 017 LATER PATENTS)
 AI US 1983-565023 19831222
 XPD 22 Dec 2003
 FI US 4605961 19860812
 DT Utility; EXPIRED
 FS ELECTRICAL
 GRANTED
 CLMN 44
 GI 15 Drawing Sheet(s), 29 Figure(s).
 AB A subscriber cable television system using predominantly digital signal processing techniques employs an improved time-warp and segment **scrambling** method for providing extremely high security. Means are also disclosed for suppressing the undesirable effects of discontinuities in the scrambled video signal by methods of inserting additional data samples between adjacent continuous segments, and by dithering the video line positions of the discontinuities. Preferably the scrambler and descrambler each have a memory for storing video samples, first and second address counters for providing read and write addresses to the memory, and means for decrementing or inhibiting address counting during the time between segments of continuous video samples in order to insert and delete samples during **scrambling** and descrambling, respectively.
 CLMN 44
 GI 15 Drawing Sheet(s), 29 Figure(s).
 L1 ANSWER 33 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 01683083 IFIPAT;IFIUDB;IFICDB
 TI VIDEO ENCRYPTION SYSTEM
 INF Robbins, Clyde N, Fort Washington, PA
 IN ROBBINS CLYDE N
 PAF General Instrument Corporation, New York, NY
 PA GENERAL INSTRUMENT CORP (33928)
 EXNAM Buczinski, Stephen C
 EXNAM Wallace, Linda J
 AG Hopgood, Calimafde, Kalil, Blaustein & Judlowe
 PI US 4598318 A 19860701 (CITED IN 008 LATER PATENTS)
 AI US 1983-502958 19830610
 XPD 1 Jul 2003
 FI US 4598318 19860701
 DT Utility; REASSIGNED
 FS ELECTRICAL
 GRANTED
 MRN 004170 MFN: 0947
 CLMN 20
 GI 4 Drawing Sheet(s), 6 Figure(s).
 AB An encrypted video distribution system includes a signaloriginating head end for **scrambling** outgoing television programbearing signals. In particular, the video content of selected lines is inverted about a reference voltage level, and the inversion reference level amplitude transmitted in pulse form during the horizontal synchronizing pulse interval. Line video inversion/non-inversion is controlled by a keyed pseudo random generator. At each authorized subscriber location, all inverted lines are restored to proper format, using the accompanying received inversion amplitude level present during horizontal sync as a reference. A pseudo random generator is included in the receiver descrambling circuitry and operates in a sequence identical to the like circuit at the head end to identify those lines requiring video inversion.

CLMN 20
GI 4 Drawing Sheet(s), 6 Figure(s).

L1 ANSWER 34 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 01467654 IFIPAT;IFIUDB;IFICDB
TI VIDEO SIGNAL PROCESSING SYSTEM
INF Osaka, Hiroshi, Toda, JP
IN OSAKA HIROSHI (JP)
PAF Clarion Co, Ltd, Tokyo, JP
PA CLARION CO LTD JP (5555)
EXNAM Buczinski, S C
AG Harris, Kern, Wallen & Tinsley
PI US 4398215 A 19830809 (CITED IN 009 LATER PATENTS)
AI US 1980-182330 19800828
XPD 28 Aug 2000
PRAI JP 1979-111695 19790903
FI US 4398215 19830809
DT Utility
FS ELECTRICAL
GRANTED

MRN 003797 MFN: 0549
CLMN 7

GI 2 Drawing Sheet(s), 3 Figure(s).

AB A video signal processing system in which a synchronizing signal component of a television video signal is inverted with reference to a pedestal level and expanded higher than a video component and horizontal synchronizing signals are reduced so that each of the horizontal synchronizing signals may correspond to plural lines.

CLMN 7

GI 2 Drawing Sheet(s), 3 Figure(s).

L1 ANSWER 35 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
AN 00784881 IFIPAT;IFIUDB;IFICDB
TI TECHNIQUE FOR ENCODING AND DECODING SCRAMBLED T.V.TRANSMISSIONS BY THE
SIMULTANEOUS TRANSMISSION OF THE ENCODING AND DECODING SIGNALS
INF Kamen, Ira, Lloyd Harbor, NY
Vogelman, Joseph H, Roslyn, NY
IN KAMEN I; VOGELMAN J
PAF Theatre Vision, Inc, Woodbury LI, NY
PA THEATRE VISION INC
EXNAM Borchelt, Benjamin A
EXNAM Psitos, A M
AG Nichol M Sandoe et al
PI US 3736369 A 19730529 (CITED IN 019 LATER PATENTS)
AI US 1972-234014 19720313
XPD 29 May 1990
FI US 3736369 19730529
DT Utility
FS ELECTRICAL
GRANTED

CLMN 12

GI 3 Drawing Sheet(s), 8 Figure(s).

AB A subscriber television system in which the television signal is encoded at the transmitter in a manner that causes the video and/or audio portion of the signal to be received in a scrambled form at the receiver. A decoder at the receiver operates in response to the subscriber's use of a program-select and decoding element having a conducting pattern thereon. When a programselect ticket having the proper conducting pattern is utilized, a network on the decoder produces an enabling signal which actuates the decoding or unscrambling circuitry at the receiver to thereby decode the received, scrambled signal.

CLMN 12

GI 3 Drawing Sheet(s), 8 Figure(s).

L1 ANSWER 36 OF 45 USPAT2 on STN
AN 2002:21691 USPAT2
TI Enhancing operations of video tape cassette players
IN Yuen, Henry C., Redondo Beach, CA, United States
Kwoh, Daniel S., Flintridge, CA, United States
Mankovitz, Roy J., Encino, CA, United States
Hindman, Carl, Redondo Beach, CA, United States
Ngai, Hing Y., Rancho Palos Verdes, CA, United States
Ng, Yee Kong, Tai Po, HONG KONG
Leung, Elsie Y., South Pasadena, CA, United States
PA Index System, Inc., Tortola, VIRGIN ISLANDS (US) (non-U.S. corporation)
PI US 6701060 B2 20040302
AI US 2001-814948 20010321 (9)
RLI Continuation of Ser. No. US 1997-898569, filed on 22 Jul 1997, now
abandoned Continuation of Ser. No. US 1996-673747, filed on 26 Jun 1996,
now abandoned Continuation of Ser. No. US 1993-176852, filed on 30 Dec
1993, now abandoned Continuation-in-part of Ser. No. US 1993-167678,
filed on 15 Dec 1993, now abandoned Continuation-in-part of Ser. No. US
1993-66666, filed on 27 May 1993, now abandoned Continuation-in-part of
Ser. No. US 1993-14541, filed on 8 Feb 1993, now abandoned
Continuation-in-part of Ser. No. US 1993-1125, filed on 5 Jan 1993, now
abandoned Continuation-in-part of Ser. No. US 1992-883607, filed on 7
May 1992, now abandoned Continuation-in-part of Ser. No. US 1992-817723,
filed on 7 Jan 1992, now abandoned Continuation-in-part of Ser. No. US
1991-805844, filed on 5 Dec 1991, now abandoned Continuation-in-part of
Ser. No. US 1991-747127, filed on 19 Aug 1991, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Chevalier, Robert
LREP Christie, Parker & Hale, LLP
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 191 Drawing Figure(s); 167 Drawing Page(s)
LN.CNT 8831
AB Operation of a video cassette player is facilitated by providing a VBI
decoder which decodes information, such as title, channel, date, time
and length of broadcast programs and utilizing the information in
providing directory of the programs as well as control of the VCR. The
video cassette player is also provided with a VBI encoder for inserting
control as well as directory information into the tape, either in the
VBI portions of the video track or in the control track.

L1 ANSWER 37 OF 45 USPAT2 on STN
AN 2001:217615 USPAT2
TI Information signal output control method, information signal duplication
prevention method, information signal duplication prevention device, and
information signal recording medium
IN Ogino, Akira, Chiba, JAPAN
PA Sony Corporation, Tokyo, JAPAN (non-U.S. corporation)
PI US 6433946 B2 20020813
AI US 2001-821350 20010329 (9)
RLI Division of Ser. No. US 1998-7186, filed on 15 Jan 1998
PRAI JP 1997-10212 19970123
DT Utility
FS GRANTED
EXNAM Primary Examiner: Holder, Regina N.
LREP Maioli, Jay H.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 1376
AB If only any one of a pair of an SS anti-duplication control signal S5
and copy guard signal S6 generated correlatively each other added on the

rendered unusable due to an induced "wobble" between the active video and the associated sync pulses. The scrambled television signal is readily viewable on a compliant high definition television set which descrambles the HDTV signal using an encoded indication of the amount of wobble accompanying the HDTV signal. Also provided is a special interface to prevent unauthorized persons from using the indication of the amount of wobble so as to defeat the **scrambling**. Also provided are method and apparatus for defeating the **scrambling** method and hence allowing recording of the scrambled video signal.

CLMN 61 21 Figure(s).

FIG. 1 shows a selected sync pulse carrying offset information for HDPK.
 FIG. 2 shows a tri-level pulse used in the high definition video signal of FIG. 1.
 FIG. 3 shows a block diagram of an HDPK scrambler.
 FIG. 4A shows a block diagram of an HDPK descrambler; FIG. 4B shows an alternate HDPK descrambler.
 FIG. 5 shows an attack on the HDPK **scrambling** by blanking edge tracking.
 FIG. 6 shows an example of edge fill using noise fill.
 FIG. 7 shows an example of edge fill using DC edge fill.
 FIG. 8 shows an example of edge fill using mirrored video edge fill.
 FIG. 9 shows a schematic of an embodiment of the HDPK secure video interface.
 FIG. 10 shown an implementation of the interface of FIG. 9.
 FIG. 11A shows a standard HDTV set; FIG. 11B shows an HDTV set with the stealth interface; FIG. 11C shows a compliant HDTV set without the stealth interface.
 FIG. 12A shows a dynamic range HDPK defeat technique; FIG. 12B shows a corresponding circuit; FIG. 12C shows the corresponding transfer function; FIG. 12D shows a related defeat technique; FIG. 12E shows the corresponding circuit.
 FIG. 13A shows a sync peaking HDPK defeat technique; FIG. 13B shows corresponding sync pulse waveforms; FIG. 13C shows a corresponding circuit.
 FIG. 14 shows an alternative to the FIG. 13A technique.
 FIG. 15A shows a level shift HDPK defeat technique; FIG. 15B shows a corresponding circuit.
 FIG. 16A shows an invented sync HDPK defeat technique; technique; FIG. 16B shows corresponding sync pulse waveforms; FIG. 16C shows a corresponding circuit.
 FIG. 17A shows a wobbled white pulse HDPK defeat technique; FIG. 17B shows a corresponding circuit; FIG. 17C shows detail of the FIG. 17B circuit.
 FIG. 18 shows a circuit for an audio carrier HDPK defeat technique.
 FIG. 19 shows a circuit for a digitized VBI data HDPK defeat technique.
 FIG. 20 shows an arrangement to defeat HDPK using a decoder.
 FIG. 21 shows an arrangement to defeat HDPK using time base correction.

L1 ANSWER 2 OF 45 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 10062682 IFIPAT;IFIUDB;IFICDB
 TI SIGNAL REPRODUCING/RECORDING/TRANSMITTING METHOD AND APPARATUS AND SIGNAL
 RECORDING MEDIUM
 INF Sako; Yoichiro, Chiba, JP
 Yoneyama; Shigeyuki, Tokyo, JP
 IN Sako Yoichiro (JP); Yoneyama Shigeyuki (JP)
 PAF SONY CORPORATION
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 PI US 2002006199 A1 20020117
 AI US 2001-885733 20010620
 RLI US 2000-610783 20000706 CONTINUATION PENDING
 US 1996-690224 19960719 CONTINUATION-IN-PART 6108423
 PRAI JP 1995-185724 19950721
 JP 1995-185725 19950721

JP 1996-121988 19960516
FI US 2002006199 20020117
 US 6108423
DT Utility; Patent Application - First Publication
FS ELECTRICAL
 APPLICATION

CLMN 58

GI 20 Figure(s).

FIG. 1 illustrates a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 2 illustrates the copy management information.

FIG. 3 is a circuit diagram for illustrating a **scrambling** circuit.

FIG. 4 illustrates the structure of an optical disc.

FIG. 5 illustrates the structure of a data sector.

FIG. 6 illustrates the structure of a TOC sector.

FIG. 7 illustrates another embodiment of a step of manufacturing a master disc and a step of reproducing a duplicated disc.

FIG. 8 is a waveform diagram showing the state in which a protection code signal has been appended to an analog video signal.

FIG. 9 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into analog video data for copying.

FIG. 10 is a waveform diagram showing the state in which an analog protection code signal has been appended to an analog video signal.

FIG. 11 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are again converted into an log video data for analog copying.

FIG. 12 is a waveform diagram showing the state in which an analog protection code signal and a protect code signal have been appended to an analog video signal.

FIG. 13 is a block circuit diagram showing the structure of an arrangement for prohibiting unauthorized copying in which digital video signals are converted into analog video signals which are analogically and digitally copied.

FIG. 14 illustrates another illustrative example of the copy management information.

FIG. 15 illustrates a **color burst** inverting operation.

FIG. 16 is a circuit diagram for illustrating another example of the **scrambling** circuit.

FIG. 17 illustrates another example of a sector format.

FIG. 18 illustrates another embodiment of a sector header of the sector format of FIG. 17.

FIG. 19 illustrates an alternative embodiment of the invention featuring replication onto various forms of media, satellite communication and charging implementation.

FIG. 20 illustrates an alternative embodiment of the invention wherein copy protection is implemented according to a user's account status.

AB A video signal reproduction system for receiving a video signal transmitted via a satellite communication link at a receiving device. A copy permission indicator is inserted in the received video signal. The copy permission indicator is generated on the basis of copy management information that has been appended to the video signal and detected by the system. The indicator is in the form of a multiple of coded bits which are arrayed at a pre-set position in the video signal and are operable to indicate a generation limitation on copying of the video signal.

CLMN 58 20 Figure(s).

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FIG. 19 illustrates an alternative embodiment of the invention featuring replication onto various forms of media, satellite communication and charging implementation.

FIG. 20 illustrates an alternative embodiment of the invention wherein copy protection is implemented according to a user's account status.

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TI SIGNAL REPRODUCING /RECORDING/ TRANSMITTING METHOD AND APPARATUS AND
SIGNAL RECORD MEDIUM
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PI US 2002006198 A1 20020117
AI US 2001-885579 20010620
RLI US 2000-610783 20000706 CONTINUATION PENDING
US 1996-690224 19960719 CONTINUATION-IN-PART 6108423
PRAI JP 1995-185724 19950721
JP 1995-185725 19950721
JP 1996-121988 19960516
FI US 2002006198 20020117
US 6108423
DT Utility; Patent Application - First Publication
FS ELECTRICAL
APPLICATION
CLMN 58
GI 20 Figure(s).